ANNEXES TO THE

COMMISSION STAFF WORKING DOCUMENT

accompanying the

Proposal for a

COUNCIL REGULATION

amending Regulations (EC) No 1290/2005 on the financing of the common agricultural policy and (EC) No 1234/2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation) in order to set up a School Fruit Scheme

Impact Assessment

{COM(2008) 442}
{SEC(2008) 2226}

ANNEX 1: Members of the Inter-service Group (ISG)

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ANNEX 2: THE MANDATE

Inter-Service Group for the Impact Assessment on a proposal for increasing fruit and vegetable consumption by school children

1. Context

In June 2007 the Council has reached a unanimous political agreement on wide-ranging reform of the Common Market Organisation (CMO) 'Fruit and Vegetables' to bring this sector into closer line with the rest of the reformed Common Agricultural Policy. The new CMO is another step towards a more market oriented European farm sector, enabling the producers themselves to build their future on quality, traceability and sustainable production.

Consequently, crisis management and prevention is left to the Producer Organisations, export refunds and processing aids have been abolished and Fruit and Vegetables are fully integrated in the Single Payment Scheme.

This reform is another step in the global CAP reform process. The evolution implies also a changing role for public administrations focusing more on rural development types of actions and also, more on "soft regulations" such as consumer information and promotion of quality agricultural products,

One of the objectives of the reformed CMO has been to encourage the stagnating consumption of fruit and vegetables. During the elaboration of the final CMO text in the Council, specific emphasis has been given to young people, in line with the Commission White Paper on Nutrition, Overweight and Obesity[1]. This paper, adopted on 30 May 2007, stresses the need of coherent action in this respect at community level. It also draws attention to the role the Common Agriculture Policy could play in shaping the European diet and to fight obesity and overweight. Thus, the Council approved the following declaration in the framework of CMO of Fruit and Vegetables reform:

"In light of the dramatic increase in obesity amongst schoolchildren, which has been highlighted in the recently published Commission White Paper "A Strategy for Europe on Nutrition, Overweight and Obesity related health issues", the Council invites the Commission to come forward with a proposal for a school fruit scheme as soon as possible based on an impact assessment of the benefits, practicability and administrative costs involved."[2]

The Commission has confirmed its interest for the creation of a "School Fruit Scheme" under the condition of the results of an appropriate Impact Assessment[3].

2. Issue at Stake

As pointed out by the Impact Assessment for the reform of the Fruit and Vegetables sector[4], the consumption of fruit and vegetables across Europe is not sufficient according to the WHO recommendations, and even more, it is in general stagnating.

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1 COM(2007) 279final.
2 Interinstitutional File 2007/0012 (CNS).
3 Minutes of Commission meeting of 6 June 2007.
4 COM(2007) 17 final – SEC(2007) 75.

In order to reverse the current trend, and to increase consumption of fruits and vegetables across Europe, three groups of consumers could be targeted for action: elderly people (though elderly homes), the working population (through workplaces); children (through schools). The advantage of targeting children over targeting the two other groups is that while most children are at school, not all elderly people are at elderly homes and not all grownups are at work. Moreover, today's children will grow to be future consumers, and eating habits learned at an early stage, will determine their consumer choices through their life.

The rise in child obesity can be called an epidemic with an estimated 22 Mio children overweight in EU-25 out of which 5.1 Mio children are considered obese. This figure is rising by 1.2 Mio of overweight and by 300 000 of obese children per year. An estimation of the economic costs of ill-health due to obesity reaches about 6% of the total health sector bills in EU-25. Together with linked social cost this amount is estimated at reaching up to € 130 billion per year[5].

According to Article 152 of the EU Treaty, a high level of human health protection shall be ensured in the definition and implementation of all Community policies and activities. Community action should complement national policies and be directed towards improving public health, preventing human illness and diseases, and obviating sources of danger to human health. The Community should encourage cooperation between Member States in this area and, if necessary, lend support to their action. The Commission may, in close contact with the Member States, take any useful initiative to promote coordination of policies and programmes in this area.

The need for a concerted and coherent action at the European policies level in the fight against obesity has been stressed by the White Paper on "A Strategy for Europe on Nutrition, Overweight and Obesity related health issues", published on 30 May 2007. The paper draws attention to the important role of fruit & vegetables in a healthy diet to fight obesity and overweight.

The health benefits of a high intake of fruits & vegetables are associated with a reduced risk for a number of diseases and also as protective of overweight and obesity. However, consumption of fruit & vegetables in almost all EU-27 Member States is below the threshold recommended by the World Health Organisation of 400 g per person per day. The Impact assessment accompanying above mentioned White Paper defines in detail the problems related to obesity and the case for action at EU level[6].

In this context, and recognising the fact that healthy eating habits are created in early age, the Commission White Paper states that *"a school fruit scheme co-financed by the European Union would be a big step in the right direction. Such a scheme should be targeted at children between 4 and 12 years old and will be part of the reform of the CMO for fruit & vegetables"*.

Within EU-27 Member states, a wealth of initiatives and programmes aiming at providing healthy food stuffs to children already exits. One of them is the EU-funded

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5 *Dr Tim Lobstein, Freshfel workshop in preparation of EGEA conference, European Parliament 17 April 2007.*

6 SEC(2007) 707.

School Milk Scheme. Others are national, regional or local programmes, managed by agriculture or educational authorities or NGOs, funded with or without public support[7].

Un programme européen "Fruits dans les écoles" pourrait offrir un cadre et des moyens pour enrichir, renforcer et impulser des initiatives qui tentent d'accroître durablement la part de fruits et légumes dans le régime des jeunes en âge scolaire, lorsque se forment les habitudes alimentaires.

3. Impact Assessment

L'analyse d'impact devra chercher principalement à:

- étayer la pertinence (y inclus les coûts et les avantages) d'un programme européen, au regard notamment des principes de subsidiarité et de proportionnalité, en précisant son articulation avec les initiatives nationales et les opportunités de synergie avec d'autres initiatives de l'Union dans ce domaine;
- identifier les types d'action qui pourraient être soutenues par le programme, compte tenu de l'existence d'une valeur ajoutée communautaire, ainsi que ses principes de fonctionnement, taking into consideration the policy objectives of social and regional cohesion (Convergence Objective regions);
- identifier le domaine d'activité de la Commission recensé être responsable de la gestion et du financement du programme;
- apprécier les coûts (y compris les coûts administratifs) et les avantages de différentes options pour la mise en œuvre du programme;
- analyser l'impact sur les marchés agricoles;
- analyser l'impact sur la sante publique en augmentant la consommation journalière des fruits et légumes pour atteindre les recommandations de WHO (min. 400 g/jour)
- s'assurer la cohérence des mesures proposées avec les autres mesures visant à encourager la consommation de fruits et légumes, notamment avec les mesures de promotion déjà en place.

Ce faisant, l'analyse prêtera une attention particulière aux aspects du programme signalés par la Commission: "le coût budgétaire, les bénéfices en termes de santé publique, les bénéfices du développement dès l'enfance d'habitudes alimentaires saines, la pertinence par rapport au rapprochement entre l'UE et ses citoyens, la cohérence par rapport aux différentes politique communautaires et aux obligations émanant des règles du commerce international, les conditions et les modalités précises de fonctionnement du programme afin d'en assurer le succès de sa mise en œuvre"[8].

Pour éclairer le contexte et les enjeux du programme, l'analyse exploitera les travaux conduits en préparation des récentes initiatives en matière de nutrition et notamment du Livre blanc "Une stratégie européenne sur la nutrition, le surcharge pondérale, l'obésité et les questions relatives de santé[9]"

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7 This has become evident at the EGEA conference on 'The role of Fruit & Vegetables in the fight against Obesity', Brussels 17 – 19 April 2007.

8 Compte-rendu de la réunion de la Commission du 6 juin 2007.

9 SEC(2007) 707.

Pour identifier les actions et les modalités du programme, l'analyse cherchera à tirer les enseignements d'évaluations existantes d'initiatives publiques et privées orientés vers les milieux scolaires en général, et de promotion d'une alimentation saine en particulier. Il s'agiterait de mieux comprendre leurs conditions de réussite ou les raisons de leur échec. Elle exploitera également les contributions pertinentes reçues à l'occasion de la consultation organisée en vue de la réforme de l'OCM "fruits et légumes". Pour faciliter ces tâches, le Groupe interservices auditionnera des experts, des promoteurs et des parties prenantes de certaines de ces initiatives.

Une consultation cherchera à intégrer l'appréciation des acteurs sur la faisabilité et l'impact des différentes options de mise en œuvre du programme.

Les membres du Groupe seront sollicités, selon leur domaine de compétence, pour aider à l'identification et à l'analyse des initiatives et des travaux pertinents, pour la formulation des actions et des modalités du programme, pour apporter un concours méthodologique pour l'appréciation des coûts et avantages de différents options de mise en œuvre, et pour apprécier la cohérence et le potentiel de synergie du programme avec les actions de l'Union dans le cadre d'autres politiques.

Within the impact assessment analysis, an attempt will be made to define some core indicators for the main policy objectives and to outline the monitoring and evaluation arrangements envisaged.

Les travaux du Groupe commenceront le 13 septembre, se poursuivront au rythme moyen d'une réunion par mois et s'achèveront en février 2008.

Le Groupe sera animé par Tomas Garcia Azcarate. Son secrétariat sera assuré par Félix Mittermayer et Agnieszka Gogolewska.

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ANNEX 4: PARTICIPATION IN EVENTS

In order to make further contact with interested organisations and members of the public, DG AGRI representatives participated in a number of events in Member States. As well as offering an opportunity to inform stakeholders and the general public about the Impact Assessment exercise, these occasions provided the possibility of developing an active dialogue with the concerned sectors. The events attended were the following:

- 18 January 2008: Grüne Woche in Berlin. Discussion with school children, with participation of Agriculture Commissioner Mariann Fischer Boel, representatives of the German fruit and vegetable sector and the coordinator of the national '5-a-Day' campaign concerning the need to establish a School Fruit Scheme at European level.

- 7 February 2008: Fruit Logistica in Berlin. A round table discussion "European Commission: School Fruit for all?" was held with sector representatives, public authorities, experts and NGOs, with an audience of 150 people.

- 25 February 2008: Salon d'Agriculture in Paris. With the participation of Agriculture Commissioner Mariann Fischer Boel and French Agriculture Minister Michel Barnier, a debate took place on the theme "Healthy food for healthy children – What role for the EU?" with representatives of the sector and public authorities.

- 11 March 2008: Alimentaria in Barcelona. A conference was held on the School Fruit Scheme entitled "Healthy food for healthy children – what role for the EU?" This provided a forum to exchange views and experiences between Commission representatives, the public authorities, project promoters and NGOs.

- 1 April 2008: UK Public Health Association's annual conference. The possible School Fruit Scheme was presented as part of a panel discussion on "A CAP for Health".

- 7 April 2008: Tech Agro, Brno, Czech Republic. "Tea-time discussion" with representatives of the Czech fruit and vegetable sector and the relevant government agencies concerning the SFS.

- 18 April 2008: MACFRUT 2008, Cesena, Italy. Round table "remain in good health by eating fruit and vegetables".

- 7 May 2008: Madrid. General Assembly and 1st Professional Day of the Spanish "5 al Dia" campaign.

Feedback obtained in the course of these events has been important to the Impact Assessment process and the conclusions drawn in this report.

ANNEX 5: ONLINE PUBLIC CONSULTATION

TOWARDS A POSSIBLE EUROPEAN SCHOOL FRUIT SCHEME

REVISED CONSULTATION DOCUMENT FOR IMPACT ASSESSMENT

The consultation paper has been amended for the sake of greater clarity of the presented options for the School Fruit Scheme

CONTEXT AND AIMS OF THE CONSULTATION

In September 2007, the European Union adopted a wide-ranging reform of the Common Market Organisation (CMO) Fruit and Vegetables[10] to promote the competitiveness and market orientation of this sector and bring it more closely in line with the rest of the reformed Common Agricultural Policy (CAP). One of the objectives of the reformed CMO is to reverse the declining consumption of fruit and vegetables.

The importance of fruit and vegetables consumption as part of a healthy diet is also advocated by the White Paper on 'Nutrition, Overweight and Obesity'[11], which stresses the need for coherent action at European level and draws attention to the role the CAP could play in shaping the European diet, especially to combat obesity and overweight. It states that "*a School Fruit Scheme would be a step in the right direction*".

When approving the CMO 'Fruit and Vegetables' reform, the Council issued the following declaration[12]: *"In light of the dramatic increase in obesity amongst schoolchildren, which has been highlighted in the recently published Commission White Paper … the Council invites the Commission to come forward with a proposal for a school fruit scheme as soon as possible based on an impact assessment of the benefits, practicability and administrative costs involved."*

In keeping with the Commission's commitment to better legislation, the presentation of a 'School Fruit Scheme' proposal will be conditional on the conclusions of an assessment demonstrating its value added at European level and analysing the advantages and drawbacks of different options[13].

To help bring together the range of expertise necessary for this assessment and to facilitate the preparation of the proposal, this work has been entrusted to an Inter-Service Group (ISG) made up of representatives of the Commission services concerned.

Since it was set up in September 2007, the ISG has organised a series of hearings with experts, promoters of school fruit schemes, stakeholders and the Member States. The contributions received within this consultation process can be found on the 'School Fruit Scheme' webpage: http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index_en.htm

On the basis of these consultations, the ISG has identified four options for a European 'School Fruit Scheme'.

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10 http://ec.europa.eu/agriculture/capreform/fruitveg/index_en.htm
11 http://ec.europa.eu/health/ph_determinants/life_style/nutrition/keydocs_nutrition_en.htm
12 Council declaration in the framework of the CMO 'Fruit and Vegetables' reform on 15 June 2007
13 Minutes of the European Commission meeting 6 June 2007

The ISG is now seeking contributions to enrich these options, and to help assess their feasibility and possible impact. Contributions should be sent:

- preferably by e-mail: AGRI-HORT-SCHOOLFRUIT@ec.europa.eu
- or alternatively by post: 'School Fruit Scheme'
  LOI 130 7/47
  European Commission
  130, rue de la Loi
  B-1049 Brussels

Contributions received by 29 February 2008 – the closing date of the consultation – will be taken into account in the report.

OBJECTIVES

Within the Member States of the European Union, a wealth of initiatives and programmes providing fruit and vegetables to children in school settings already exists. These national, regional or local programmes are managed by agriculture or educational authorities or NGOs, with or without the help of public funding[14].

Initiatives promoting healthier diet and the consumption of fruit and vegetables also exist at European level. These include fruit and vegetables promotion programmes within the CMO or in the framework of the general agricultural promotion programmes[15], actions initiated by the members of the European Platform for Diet, Physical activity and Health[16] and research projects on the relationship between the consumption of fruit and vegetables and a healthy diet, funded under the EU's Framework Programmes for research and technological development[17].

A European 'School Fruit Scheme' could provide a framework and means to enrich, strengthen, ensure coherence and promote new initiatives aimed at durably increasing the share of fruit and vegetables in the diet of schoolchildren, at an age when eating habits are shaped.

According to the ISG, the objectives of such a scheme would be to:

– Increase the long-term consumption of fruit and vegetables among schoolchildren;

– Foster healthy eating habits among schoolchildren, so contributing to a lasting improvement in health and a decline in obesity;

– Facilitate access to initiatives promoting the consumption of fruit and vegetables by schoolchildren in poorer regions and among disadvantaged sections of the population;

– Bring Europe closer to its citizens by responding to their real concerns.

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14 This became evident at the EGEA conference on 'The role of Fruit and Vegetables in the fight against Obesity', Brussels 17 to 19 April 2007, and also during the consultation process within the ongoing impact assessment.

15 http://ec.europa.eu/agriculture/prom/index_en.htm

16 http://ec.europa.eu/health/ph_determinants/life_style/nutrition/platform/platform_en.htm

17 http://cordis.europa.eu/food/projects.htm

In order to compare the merits of various options for the implementation of a European Scheme, the following criteria are also deemed to be relevant:

- The cost-effectiveness of the scheme, which should justify European action in this field, taking into account the limited scope of the EU budget for such an initiative;

- The possibility to adapt the actions supported to the specific needs and capacities of various local, regional and national contexts.In addition, the possible beneficial effects on the environment of each of the options could be taken into consideration.

THE OPTIONS

The ISG identified four options for the implementation of a European 'School Fruit Scheme' which will be explored during the impact assessment process. They are not mutually exclusive; some of their elements could be combined to form a new option. The options are listed in order of increasing EU involvement and elements of options 2, 3 and 4 could be combined.

Option 1: Status Quo – No new formalised EU involvement

Under this option, there would be no new initiative at European level ('no policy change scenario'). The ongoing Member State and EU activities are judged sufficient.

The EU activities aimed at increasing the Fruit and Vegetables consumption are the following:

- Council Regulation (EC) No 2826/2000 of 19 December 2000 on information and promotion actions for agricultural products on the internal market provides for a Community contribution to certain promotion actions of up to 50%. Within the context of the reform of the fruit and vegetable sector adopted in June 2007 it was agreed that as regards the promotion of fresh fruits and vegetables, a special focus should be given to promotion targeted at children in educational establishments. In such cases, the percentage of Community financial contribution should be increased from 50% up to 60%. The indicative annual budget for promotion actions within the sector was increased by € 6 million.

- Under the Common Market Organisation for Fruits and Vegetables, registered charitable organisations are allowed to distribute produce which has been withdrawn from the market by Producer organisations for free to, among others, schools and summer camps. The cost for funding the logistics costs is eligible to be financed by the operational programmes of the producer organisations.

- The Directorate General of Research devotes an increasing level of resources to extend the knowledge on the drivers for preventing obesity in target groups such as infants, children and adolescents in order to better understand the interaction between nutrition, gene and health, the determinants of food choice and the consumer behaviour. This new information will provide further scientific data to improve healthy diet and combat obesity. More information on http://cordis.europa.eu/food/projects.htm

- Some of the members of the European Platform for Diet, Physical activity and Health have committed to actions aiming to increase the intake of fruit and vegetables in the European population.

http://ec.europa.eu/health/ph_determinants/life_style/nutrition/platform/database/web/dsp_search.jsp

This option not only serves as a reference for assessing all other options but is itself a real policy option.

Option 2: Networking – Limited new EU involvement based on existing framework

In a number of Member States, a variety of stakeholders are promoting all kinds of projects, which include the distribution of fruit and vegetables to schoolchildren. These project and programme promoters face similar issues and obstacles in their daily work but they have found different approaches to deal with them. Bringing together regional project promoters from the agricultural, health and education sectors can facilitate the exchange of experience and the transfer of know-how.

The Commission would implement this by establishing an e-based network of experts and project promoters for the distribution of fruit and vegetables to school children, host and organise regular 'best practice' conferences and organise regional seminars in the Member States. It would fund and manage the activities, implemented together with the Member States and the sector. The limited additional budget involved would be managed solely by the Commission. Implementation would follow the model of the existing DG AGRI external communication activities.

This option is based on the example of the information measures on the CAP.

The Management Committee for the Common Organisation of Agricultural Markets would be regularly informed and consulted about the activities and the results of the exchange of information on best practices.

Option 3: Supporting initiatives – Increased EU involvement building on the existing Council legislation

This option would imply further development of existing framework (Council legislation on promotion of agricultural products), requiring a change of Council legislation and an additional budget.

Within this bottom-up approach, the European Union would support initiatives for the promotion of fruit and vegetable consumption at school, including the possibility for co-financing the supply/distribution of fruit and vegetables.18 This could take the form of pilot projects like the EU support which has been given to the Irish Fruit Dude programme. These would be selected from projects identified by Member States on the basis of a call for proposals, which would include common general eligibility criteria. These could be, for example, the active involvement of the public health and education institutions in programme design and implementation; monitoring and evaluation; priority targeting at younger schoolchildren; multi-annual programming. Beyond the supply of fruit and vegetables, the initiatives supported could include accompanying activities aimed at changing the eating habits of schoolchildren, such as training and awareness-raising initiatives, the production of specific promotional material, site visits.

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[18] Given the EU international trade obligations no discrimination of produce on basis of country of origins possible would be possible in the context of the scheme. For example bananas of all origins (EU and third countries) should be eligible.

The implementation would be modelled roughly on the current promotion programmes with management shared between the Commission and Member States. The financing would be targeted at projects being able to constitute a best practice for other programmes in other Member States and could be additional to (not replace) existing national financing. The Member States would draw up a provisional list of programmes they had selected and forward it to the Commission, which would have to decide which programmes to co-finance.

The EU's financial contribution to the programmes could be modulated and not exceed, for instance, 50% of the real cost, except in convergence regions where it could be raised to reach 75%. Co-financing would be compulsory; the proposing organisations would have to fund part (for instance 20%) of the real costs of the programmes concerned.

Option 4: Driving initiatives – Specific EU initiative

The measures foreseen in this option could also be in addition to what is included in options 2 and 3. With the objective of significantly increasing and enhancing the supply and distribution of fruit and vegetables to schools across the EU, a substantial budget would be necessary. In order to ensure active involvement of national authorities and to increase significantly the available budget, co-financing of such distribution would be required.

The budgetary allocation per Member State would follow common objective criteria, such as the number of children in the target group. This option would establish a single EU framework for a School Fruit Scheme with implementation mechanisms similar to the current 'School Milk Programme'[19], providing maximum flexibility.

In principle, all kinds of fruit and vegetables (fresh and processed, regardless of country of origin18) would be eligible for funding. However, the Commission would establish a negative list of products, for example with high added sugar content.

In this option also, the EU's financial contribution to the programmes could be modulated and not exceed, for instance, 50% of the real cost, except in convergence regions where it could be raised to reach 75%. Co-financing would be compulsory; the proposing organisations would have to fund part (for instance 20%) of the real costs of the programmes concerned.

QUESTIONS

The ISG is aware that the options it has chosen to explore take account of a limited series of factors and that, without modification, they do not exhaust the full range of political choices that could be offered to the Commission.

Therefore, the Commission is seeking contributions from interested parties, who are encouraged not only to evaluate these options, but also enrich them and help assess their feasibility and possible impact:

(1) **Which** is the option preferred?

[19] http://ec.europa.eu/agriculture/markets/milk/index_en.htm

– What, in your experience, are the necessary conditions for a successful initiative, able to promote a sustainable increase in the consumption of fruit and vegetables by young people and to have a lasting influence on their behaviour?

– What are the main obstacles to a successful initiative?

– What would be good criteria for evaluating the cost-effectiveness of an initiative?

– What would be the value added of an EU initiative in this field?

(2) **How** could it be improved?

– Are there factors not taken into account or elements of uncertainty that could significantly influence the impact of the options under consideration? If so, what are they? What would be their influence?

– Should the ISG seek to incorporate into its analysis an assessment of any specific impacts other than those envisaged in chapter 2?

– Do you have any examples of 'best practice' that could improve the options?

– What conditions (compulsory and/or optional) should be introduced and/or developed for the 'Supporting Initiatives' and 'Driving Initiatives' options?

(3) Is there any **other option** that you would consider adequate to reach the stated objectives?

You are invited to complete the matrix at the end of this document, which sets out the four options and seven objectives. This will make it easier for us to assess the input by the public and make a comparison between the options.

Please note

A summary of contributions received will be included in an annex to the Impact Assessment report foreseen for May 2008. All contributions received will be published on the Internet, unless specifically requested not to do so.

For regularly updated information on the next steps of the Impact Assessment exercise, please consult the 'School Fruit Scheme' webpage:

http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index_en.htm

	Status Quo	Networking	Supporting Initiatives	Driving Initiatives
Long term increase of fruit and vegetables consumption among school children				
Decrease in obesity of school children and health improvement				
Increased fruit and vegetables consumption in poorer regions and by deprived persons				
Appropriate level of initiative and administration; European value added				
Appropriate disbursement of public funds (both national and EU)				
Positive impact on the environment				
Bringing Europe closer to its citizens				

Grading: the option would have a (1) very negative impact (2) negative impact (3) neutral impact (4) positive impact (5) very positive impact;

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ANNEX 6: RESULTS OF PUBLIC ONLINE CONSULTATION

Within the consultation process running from 18 December 2007 – 29 February 2008, the Commission is seeking contributions from interested parties, who are encouraged not only to evaluate these options, but also enrich them and help assess their feasibility and possible impact:

(1) **Which** is the option preferred?

- What, in your experience, are the necessary conditions for a successful initiative, able to promote a sustainable increase in the consumption of fruit and vegetables by young people and to have a lasting influence on their behaviour?
- What are the main obstacles to a successful initiative?
- What would be good criteria for evaluating the cost-effectiveness of an initiative?
- What would be the value added of an EU initiative in this field?

(2) **How** could it be improved?

- Are there factors not taken into account or elements of uncertainty that could significantly influence the impact of the options under consideration? If so, what are they? What would be their influence?
- Should the ISG seek to incorporate into its analysis an assessment of any specific impacts other than those envisaged in chapter 2?
- Do you have any examples of 'best practice' that could improve the options?
- What conditions (compulsory and/or optional) should be introduced and/or developed for the 'Supporting Initiatives' and 'Driving Initiatives' options?

(3) Is there any **other option** that you would consider adequate to reach the stated objectives?

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STATISTICS

Contributions per MS and per sector

A total of 121 contributions emanating of 19 Member states and one contribution from Norway have been received. The consultation reached an audience covering the different dimensions of the School Fruit Scheme. Indeed, half of these contributions were proposed by organisations from the agricultural sector (farmers associations, wholesalers…). The other contributions emanate of the health sector, governments (national, regional and local) or the civil society (teachers, consumers, charities).

Country	Agri-food sector	Health	Public	Civil society	Number of contributions
Belgium	0	2	1	0	3
Bulgaria	0	0	1	0	1
Denmark	1	1	1	0	3
Estonia	0	1	0	0	1
Finland	1	3	1	0	5
France	17	0	3	0	20
Germany	4	1	2	0	7
Hungary	0	0	1	0	1
Ireland	4	8	1	6	19
Italy	1	0	0	0	1
Latvia	0	0	1	0	1
Luxembourg	0	0	0	1	1
Netherlands	7	2	1	0	10
Norway	0	0	0	1	1
Poland	2	1	1	0	4
Slovakia	0	1	0	0	1
Slovenia	0	2	3	0	5
Spain	5	0	0	0	5
Sweden	0	1	1	2	4
UK	4	6	1	2	13
Europe	11	4	0	1	15
Total	**57**	**33**	**19**	**13**	**122**

Breakdown of the contributions per Member State and per category of contributors

Preferred options

	Option 1	Option 2	Option 3	Option 4	Options 4&2	Options 4&3	Options 4&3&2	General support
Agri-food sector	0	1	2	20	21	7	2	2
Health	0	0	2	16	9	2	0	4
Public	1	0	3	8	5	2	0	1
Civil society	0	0	2	2	5	0	0	4
Total	**1**	**1**	**9**	**46**	**40**	**11**	**2**	**12**

Breakdown of the contributions per category of contributors and favourite option

(1)Answers to question 1 – Which is the option preferred?

	Option No	Necessary conditions for success	Main obstacles	EU value added	Cost-effectiveness criteria
SECTOR					
Freshfel	**4 with elements of 2**	– Flexibility – Development of children's taste by offering a wide range of quality fresh fruits and vegetables – Diversity is an essential element of the success of the campaign. Therefore, favouring organic or local produce is inappropriate. – Involvement of parents, local authorities and wholesalers (logistics expertise and availability of a wide range of fresh fruits and vegetables). – No distortion of competition between operators – Beneficiaries should be schools and children. – Development of accompanying measures (e.g 5% of the budget) such as rewards, educational material, unbranded promotion kits… – The scheme should be simple – Necessity of a long-term operation. € 100 million proposed budget is a starting point.	Key importance of budget. More than € 900 million might be desirable for allowing the distribution of a piece of fruit to each child aged 4-6 during the 30 weeks of school per year. These figures are minuscule considering the cost of obesity across Europe.	– Scale too large for the industry. EU support and guidance is needed, and EU can be a catalyst for best practices. – Obesity is a European issue and requires a European action – Concrete steps to the warnings from scientists to act now. – A pan-European scheme could guarantee stability in the long term by allowing further development of existing schemes and facilitating the undertaking of new initiatives. – Economies of scale and synergy in communication and education – EU action needed to reverse trends. Important spare of health costs expected. – Showing that EU cares about the welfare of all its children.	
Fresh Produce Ireland	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
Fyffes Group Ltd. Ireland	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
Italian National Association of	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	

F&V Exporters Importers (ANEIOA)					
Capespan UK	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
Capespan Ibérica Spain	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
Reybanpack S.A	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
Total Produce Plc	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
European fresh produce association	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
Eurobanan	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
"5 a day" in Spain	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	
5 am Tag Deutschland	**4**	– Allow for flexibility to mirror different consumption habits in Europe – Include all fruit & vegetables, also processed and dried – Target group 4 – 16 year olds	– Simple administration – Integrative approach involving parents, schools, teachers	– Additional budget – Obesity EU wide problem – Increase exchange of know-how – Bringing the EU closer to its citizens ('Putting the EU within your reach')	– Purchase of F&V on regional level for most efficient use of funds
Bord Bia – Irish food board	**4 with elements of 2**	– To be attractive: procedures and protocols must be kept to a minimum – Funding on a per child basis may help simplify procedures			
COPA-COGECA	**Combination of 3 and 4**	– distribution of tasty f&v – backing up distribution with educational initiatives	– the setting up of partnerships between all the sectors concerned	– encouraging MS with no school fruit programme to put one in place	– the consumption of f&v within the EU and its relation to the WHO recommendation of 400 g/day
AREFLH	**4 and 2**	– prendre en compte les contextes et expériences régionaux – favoriser la connaissance des produits (modes de production, caractéristiques, saisonnalité) – permettre le développement d'action d'information, de sensibilisation et d'éducation – prendre en compte les f&l frais et la 4è gamme – impliquer les acteurs locaux (producteurs,			

		distributeurs), autorités publiques (agriculture et santé), enseignement et éducation – mettre en œuvre des moyens financiers à la hauteur de l'enjeu. Estimation de 300 millions €.			
Conseil Européen des Jeunes Agriculteurs (CEJA)	**2**	– Serve healthy and tasty food at early age – Explain schoolchildren where food is coming from and establish a direct contact with the farmer	– Lack of funding and personnel. It is impossible to work with volunteers only. – Coordinators needed on local and regional levels	– Promotion of quality food from EU – Inform the consumer on high production standards in the EU – More acceptance of the agricultural budget – Trans-national networking, synergy	– Actual consumption of fruits and vegetables – Feedback from teachers and parents
Confédération des industries agro-alimentaires de l'UE (CIAA)	**3**	– Support awareness-raising initiatives aimed at children – Partnership approach between public health authorities and the private sector			
Organisation of European Industries transforming fruits and vegetables (OEITFL)	**3 and 4**	– networking must be an accompanying element – accompanying pedagogical activities (healthy eating, information about the products) must be assured			
EUCOFEL	**4**	– engage all participants in the f&v channels (public and private) – report experiences of pilot schools Creation of a European school fruit agency in order to: – process reports at regional and urban levels – coordinate efforts to communicate to schools, parents, children, foodservice staff – increase the percent cap on non-food, administrative costs – pay attention to the implementation of logistics – provide schools with additional references and resources to find FVPP foods and additional labour sources			
AlimenTerra	**4 + 2**	– plan a long-term strategic and financial framework – education about the health & environmental	– Promotion of consumption of unhealthy food through television	– ensuring health in all policies – stimulating growth and employment – supporting healthy aging	

		benefits – ban snacks and sweet soft drinks from schools – decision-making regarding the quality of f&v to be purchased must be left to the lowest appropriate administrative level – sustainability criteria (greenhouse gas emissions)	and other advertising	– potentially creating new markets – contributing to the EU environmental policy – bringing EU closer to its citizens	
Krajowa Unia Producentow Sokow	**4**	– the scheme should also cover processed fruits – promotional and educational measures (children and parents, use of a mass-media campaign) – the produce have to be easily accessible – need of a long-lasting programme – measure the results and the efficacy of the programme – products distributed have to be of good quality			
APRIFEL	**4 couplée à 2**	Voir position française + – priorité aux f&l frais – envisager une dynamique progressive (croissance du nombre de pays et du budget) – communication autour du projet	Voir position française	Voir position française	– évolution de la consommation
Fédération nationale des producteurs de fruits (FNPF)	**4 couplé à 2**	Voir position française + – accompagner les opérations de distribution par des opérations pédagogiques évoquant les coûts de production (redonner la valeur au produit) – distributions doivent être fréquentes	Voir position française	Voir position française	
Hexagro	**4 couplée à 2**	Voir position française	Voir position française	Voir position française	
Union nationale des commerces de gros en fruits et légumes	**4 couplée à 2**	Voir position française	Voir position française	Voir position française	
Reverdy SAS	**4 couplée à 2**	Voir position française	Voir position française	Voir position française	
Fédération des industries d'aliments conservés	**Supports both OEITFL and French national positions**	See OEITFL and french national positions	See OEITFL and french national positions	See OEITFL and french national positions	
CRENO	**4**				

Touraine primeurs	**4**				
SEVF - Muritours	**4**				
Les primeurs de la Champagne	**4**				
ATV primeurs	**4**				
Bonafruits	**4**				
Bourgogne primeurs	**4**				
Estivin primeurs de Loire	**4**				
Gauthier - Delhumeau	**4**				
La Controise	**4**				
Ets Montloup	**4**				
Kotimaiset Kasvikset ry	**4**				
Hero Nederland	**3**				
Agro Trendy	**4**	– budget must be sufficient – f&v both fresh and processed must be supplied directly to schoolchildren – products must be of highest quality – programme must be long-lasting – advertising measures to make consumption of f&v be"fashionable" – information of positive effects of f&v should be provided to teachers and parents	– insufficient budget – short lasting programme – inability to counteract high-budget campaigns advertising products with excessive additives – lack of flexibility of instruments	– unified scheme – volume and value of engagement – new opportunities for EU producers – possibility of a unified evaluation – possibility of exchange of best practices	– quantity of f&v provided to schools – costs of combating overweight and obesity – level of financial involvement of the different stakeholders – rise of household expenditures on f&v
Frugi Venta	**4**	– networking – co-funding exclusively between EU and MS		– stimulating national, regional and local initiatives	
Dutch produce association	**3 and 4**	– "package approach": supply of produce + educational activities – easy start with a temporary free provision – sensibilisation of parents – direct involvement of f&v suppliers and regional health services	– time burden of schools: the intervention should be easy to start up	– catalysing impact	
Holland Produce Promotion	**3 and 4**	As above	As above	As above	

Dutch Board of Horticulture	**3 and 4**	As above	As above	As above	
Nederlands Fruitelers Organisatie	**3 and 4**	As above	As above	As above	
Kids4fruit ltd.		– provide organic products (better nutritional value)			
Campina	**4 supported by 2 and 3**	– frequent supply of high quality, cleaned, ready to eat, tastefulfresh or chilled products recognizable as fruits	– a bad logistical system where the above conditions are not fulfilled	– amount of subsidy – coordination of the information of promotion – networking	– subsidy should be an amount per child per portion with a minimum portion within the year
Dole Europe	**4 with elements of 2 and 3**	– necessity to focus – flexibility – f&v delivered free to children but financial contribution of the parents or the canteen			
Bundesvereinigung der Erzeugerorganisationen Obst und Gemüse e.V. (BVEO)	**4**	– Target group: all children school, including kindergardens; – Eligible products to be determined by Member States; – costs eligible for financing: all – sectoral integration – no discrimination of EU producers – active participation of schools	No comment	No comment	
Fruchtimport vanWylick GmbH	**4**				
Finnish Horticultural Products Society (Kotimaiset Kasvikset ry)	**4**	No comment	No comment	No comment	No comment
Coordinadora de Organizaciones de Agricultores y Ganaderos (COAG)	**4 (purchase of produce, parking & logistics) + 3 ("soft" measures)**	– sustainable and long-term measures; – best quality produce: fresh and seasonal; – targeted at all school children, starting at very beginning of scolarity (2-3 years)	– compulsory co-financing from the sector	– improvement of public health and the subsequent lowering of health bill. This could be verified in the long term.	
UK fresh produce consortium	**4 complemented by 2**	– no funding by the private industry – flexibility – no distortion among operators			

		– beneficiaries must be schools and children – diversity of fresh and quality fruit – secure a consistent and reliable supply of f&v – possible financial contribution by parents or schools – involve public and private stakeholders – promotion of the scheme – long-term appropriate budget (at least € 100 m)			
European Fruit Juice Association	**General support**				As above

PUBLIC					
Finnish ministry of agriculture and forestry	**Combination of 4 and 2**	– target young children – include the scheme in the school curriculum	– highly bureaucratic scheme – exclusion of certain age groups		– growth in the consumption of f&v – medical costs savings – environmental benefits
Department of Health Promotion (Ireland)	**3**	– Financial support by the EU dispersed centrally to local Departments of Health promotion rather than directly to schools. – sustainable long terms programme – Health Promotion to take the lead role in administering and co-ordinating local programme. – evaluation – no specific targetting – sufficient administrative support for the initiative. – Involvement and consultation with all stakeholders including youth participation.	– Sustainable funding; – Limiting to just young children and just disadvantaged schools only – Lack of administration to co-ordinate – Funding directly to schools rather than being co-ordinated and linked to health.	– Allow for inter European comparative health care data. – Increase European produce thereby decreasing food miles. – Security of funding. – Counteract current marketing techniques used by food industry.	– refer to pilot programmes costs – compare with health care savings
Departmen of health and children (Ireland)	**4**	– national framework to ensure policy cohesion – sustainability (10 year financing) – link with existing networks (e.g. EU School Milk Scheme model) – flexibility – ban snacks and soft drinks from schools	– failure to secure adequate resources – lack of government support – lack of teaching staff support – absence of a national framework	– provide a quick response to EU White paper – Achieve WHO Europe goals – support f&v promotion objectives – ensure coherence across the EU	– potential health savings – uptake by children
"Pôle accessibilité" (producteurs, industrie, pouvoirs publics) **Position de la France**	**4 couplée à 2**	– mener une action sur le long terme (5 à 8 ans) – cibler une tranche d'âge large, dès le jeune âge (3 à 10 ans par ex.) – associer distribution de fruits frais et actions pédagogiques – impliquer la sphère familiale – utiliser les réseaux logistiques existants pour optimiser les coûts – relayer le programme par une communication nationale pour multiplier les initiatives – fournir des repères de consommation et promouvoir un régime alimentaire varié et équilibré	– manque de flexibilité – manque de financement pérenne au niveau local – non implication de la sphère éducative – absence de relais au niveau familial – lourdeur dans la logistique de mise en oeuvre	– action d'ampleur pouvant sensibiliser la société civile et les décideurs des Etats membres – organiser les échanges d'expérience – effet de levier via cofinancement – inciter les Etats membres à développer des programmes – rapprocher les citoyens	– mesure de l'évolution de l'achat de f&l par les écoles – mesure de l'évolution de la consommation individuelle de f&l – évolution de l'obésité – nombre d'Etats membres impliqués et part de financement national accordée

				de l'action européenne – rapprocher les politiques agricoles des politiques nutritionnelles	
Représentation permanente de la Pologne auprès de l'UE	**4**				
Ministry of Health of the Republic of Latvia	**4**	– Appropriate legislation – Adequate amount of subsidy – Active involvement of Member States			
Flemish authority Ministry of agriculture and fisheries	**Combina-tion of 3 and 4**	– complementarity with CMO and POs promotion programmes – consider a possible contribution from parents – insertion in the pedagogical project – logistical help for smaller children (washing, cutting, peeling fruits) – involvement of parents in the project			
Ministry of agriculture and rural development (Hungary)	**3**	– exchange of information is essential to find the "best practices" – subsidiarity – first target children under 10, further extension to 11-14 children is possible with parental financing – let NGOs contribute in a financial way – include promotion and education activities			
Swedish national food administration	**4**	– objective must be restricted to increase f&v consumption (obesity is too unspecific) – distribution of f&v is essential – link with educational activities – similar organisation as school milk scheme would facilitate municipalities to enter the scheme			
Slovenian ministry of agriculture, forestry and food	**4**	– target age group of children (and not schools) – supply various and seasonal f&v – supply f&v of high quality, tasteful and attractive – sustainability – educational and promotional activities – cooperation with parents and local producers	– rules must be simple for school operators – limited budget – lack of flexibility	– cover the target groups of schoolchildren in all MS – increase long-term consumption of f&v – increase equality in health within Europe	– costs (products, transport, storage) – quality of products

		– implementation harmonised with education, health, agriculture… – start in kindergartens and continue in primary and secondary schools – financial support secured by a regulation		– education – contribute to the Lisbon strategy goals	
Slovenian ministry of education and sport	**4**	As above	As above	As above	As above
Slovenian ministry of health	**4**	As above	As above	As above	As above
Ville de Narbonne	**3**	– coopération avec l'éducation nationale – formation du personnel à la préparation et distribution des fruits – sensibilisation des parents et du grand public – suppression de la publicité alimentaire pendant les programmes jeunesse à la TV – engagement dans un programme multi-annuel	– production de produits bio insuffisante, prix trop élevés – coût d'achat et de personnel – réticence des parents qui pensent qu'un fruit ne suffit pas pour un goûter	– prise de conscience par la population de l'enjeu de santé publique – augmentation de la consommation – effet de levier	– Consommation de fruits enregistrée auprès des grossistes – mesure de l'IMC chez les enfants
Scottish government	**1**	– adequate funding – reliable supplier – varied choice of fruit – consideration given to size of portion/ease of consumption/ presentation – willingness and enthusiasm of teaching staff – cooperation between local government departments – publicity in schools that fruit is good for you	– time constraints in schools – lack of storage place – inadequate funding	– it is unclear whether any EU-wide initiative would add any value	– increase of intake of f&v by children – level of wastage – identify best practices – overall increase in the demand for f&v – overall impact of the subsidy on the market price
Danish ministry of food, fisheries and agriculture	**Combination of 4 and 2**	– flexibility – ensure continuity		– a more innovative and competitive f&v sector – improvement of public health	
Ministerium fur Ernährung und Ländlichen Raum (Baden Wurtemberg)	**3**	– Flexibility in implementation allowing for regional solutions – Distribution of F&V by subscription system (free distribution not necessary) – Accompanying measures (promotion, education) – Integrating parents and teachers	– High administrative costs and complex control obligations	– Improve quality of life for all EU citizens – Reduce cost for health sector – EU support funds only promotion and communications (know-how exchange)	– Integrate regional sector representatives into program implementation – Co-funding by private sector and public authorities

Bundesministeriums für Ernährung, Landwirtschaft und Verbraucherschutz	**4**	– Target children from 4 years onwards – Flexibility in implementation allowing for member states and even regional solutions – Co-funding of purchase of F&V or accompanying measures as an option for each MS	– High administrative costs and complex control obligations – Allow for schools to decide on paid or free participation of children	– Foster know-how exchange to increase participation and availability of schemes in MS	– Integrate regional sector representatives into program implementation
HEALTH					
Slovenian Institute of public health	**4**	As above	As above	As above	As above
Healthy Food for All (Ireland)	**Combination of 4 and 2**	– ensure policy coherence (national framework) – imply all stakeholders – flexibility and adaptability – parental support needed	– absence of national framework – insufficient budget – no adequate training	– significant synergies	– take costs of inaction into account
Health centre, Co. Tipperary	**As above**	As above	As above	As above	As above
Heart of Mersey	**Combination of 4 and 2**	– long-term financial framework – sufficient funding (min € 100 million) – include educational activities – involvement of parents – simple rules – ban snacks and sweet soft drinks from schools		– ensuring health in all policies – responding to Lisbon agenda – environmental benefits – bring EU closer to its citizens	– potential savings from a reduction in premature mortality – savings from employment and environmental benefits
National Heart Alliance – Ireland	**As above**	As above	As above	As above	As above
National Heart Forum UK	**As above**	As above	As above	As above	As above
Irish Nutrition & dietetic institute	**As above**	As above	As above	As above	As above
SRDCE SRDCU	**As above**	As above	As above	As above	As above
Danish Cancer Society	**4**	As above	As above	As above	As above
6 a day Denmark	**4**	As above	As above	As above	As above
Finnish Heart Association	**4**	As above	As above	As above	As above
International Diabete Federation	**4**	As above	As above	As above	As above

Belgian Foundation against cancer	**4**	As above	As above	As above	As above
Finnish diabetes association	**4**	As above	As above	As above	As above
European Heart Network	**4**	As above	As above	As above	As above
Association of European cancer leagues	**4**	As above	As above	As above	As above
Slovenian Cancer league	**4**	As above	As above	As above	As above
Irish Heart Foundation	**4**				
European society of cardiology	**4**				
Cancer society of Finland	**4**				
Flemish league against cancer	**4**				
Dr Rainer Wild-Stiftung	**4**				
Directorate of public health, Barnsley	**3 or 4 or both**				
Stockholm centre for public health	**4**	– make a comprehensive evaluation before starting up a scheme – simple rules	– budget must be € 100 million minimum		
Cancer Research UK	**Combination of 4 and 2**				
Dutch institute for publich health and the environment		– evaluation of existing schemes			
Dental health foundation (Ireland)	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position

Netherlands Nutrition Centre	**4&3**	See Dutch produce association	See Dutch produce association	See Dutch produce association	See Dutch produce association
Dutch SchoolGruiten Programme	**4&3**	See Dutch produce association	See Dutch produce association	See Dutch produce association	See Dutch produce association
CIVIL SOCIETY					
Caritas Luxembourg	**4**	No comment	No comment	No comment	No comment
Eurocoop	**3**	– flexibility and sustainability – education – advertising campaign			
Project Manager Schoolfruit (Norway)	**3**	No comment	No comment	No comment	No comment
Cyril Drury	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position
Irish national teachers organisation	**General support**	– priority should be given to local produce – participation in the scheme decided by schools and parent associations	– lack of storage facilities		
Dundalk grammar school (Ireland)	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position
Dr. E. O'Herlihy	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position
Dr. B. Doyle-Prestwich	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position
Dr. A. Cassells	**4&2**	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position	Supports Freshfel position
Bangor University	**General support**	– increase demand by educational activities – involve parents			
Food for life partnership	**4**	Supports AlimenTerra position	Supports AlimenTerra position	Supports AlimenTerra position	Supports AlimenTerra position
Birgitta Green and Irene O'Brian Nilsson	**General support**	– frequent supply of f&v – provide a wide range of f&v	– schools limited budget	– provide a "push" in the right direction – financial support	– health savings

(2) Answers to Question 2 – How could the preferred option be improved

Consulted party	Option	How can it be improved?	Other impacts to be considered	"best practice" tips	Other conditions for options 3 and 4
SECTOR					
Conseil Européen des Jeunes Agriculteurs (CEJA)	**2**	Assure EU wide networking	– Profit from already existing networks (such as the one CEJA has established)		
AlimenTerra	**4 + 2**		– multiplier effect		– products should be seasonal – not discriminate against locally grown or produced under recognized sustainability criteria products
Fédération nationale des producteurs de fruits (FNPF)	**4 (supports the french national position)**	Voir position française	Voir position française	Voir position française	
Dutch Produce Promotion	**3 and 4**	– role of parents, suppliers and health services	– include representative control groups to be able to compare the situations with and without intervention		
Campina	**4 supported by 2 and 3**	– schools do not have enough time to do all the work: running a unique subscription scheme for parents without any involvement of the schools could be a solution			
COPA-COGECA	**Combination of 3 and 4**				– the programme must be separate from the free distribution measures – co-funding by the agriculture and health and education EU budgets – all young people of school age must be targeted – MS must have the ability to define the list of eligible products – Define a uniform manner of dividing up costs between products, packaging, transport and distribution

					– POs must occupy a privileged position – Participation of Pos, wholesalers, retailers, logistics and fast food companies in the design of the scheme – Priority must be given to Community production – Flexibility to take into account the different eating habits and school structures
Coordinadora de Organizaciones de Agricultores y Ganaderos (COAG)	**4 + 3**	As described in answer to Q1	– improvement of income of the rural population – non-abandonment of rural holdings	No comment	– option 3 on its own is not viable – option 4 should be amended as described in answers to Q1&2
			PUBLIC		
Department of Health Promotion (Ireland)	**3**	No specific targetting. Building on existing programmes.			
Departmen of health and children (Ireland)	**4**	– two-tier approach (provide more f&v in schools which have more disadvantaged students) – possible financial support by growers and distributors		– see the review published by the London school of hygiene ant tropical medicine – Limerick food partnership, food dudes	– the scheme should be pilot-tested
"Pôle accessibilité" (producteurs, industrie, pouvoirs publics) Position de la France	**4 combiné à 2**		– nécessité de coupler avec une action pédagogique – attractivité des retraits en milieu scolaire dans le cadre de l'OCM – lourdeur administrative – ne pas imposer une part minimale de financement par les professionnels (blocage)	– ne pas distribuer lors de la collation matinale	
Scottish government	**1**	– Given existing initiatives, EU should demonstrate that such an initiative is effective to tackle health/obesity problems – if funding is minimal, allow a top-up for maximal efficiency	– impact on price – real increase of intake of f&v by children or only displacement of the current demand (parents stop buying fruit for their children to take to school)	See "evaluation of the free fruit in schools initiative"	– make sure of a complementarity with existing schemes – include pre-school children (3-5 age group)

			– environmental impact (food miles)		
Slovenian ministry of agriculture, forestry and food	**4**	– administrative management should be simple – MS should assure capacitive buildings – flexibility should be incorporated in option 4 – EU Commission should monitor the implementation and make an evaluation		– National Nutrition Policy Programme – Apple in school – Development of health promotion approaches in secondary schools	Option 3: – is similar to actions from Council Regulation No 3/2008 – No provision about financial participation of MS – does not give any systemic solutions Option4: – MS should communicate specific data to EU to define EU quota funds – MS responsible for the purchase of f&v, monitoring and reporting to the EU – MS should provide capacitive building/supporting mechanism – flexibility should be emphasized – target group should be flexible inside the frame of age limits defined by EU
Slovenian ministry of education and sport	**4**	As above	As above	As above	As above
Slovenian ministry of health	**4**	As above	As above	As above	As above
Slovenian Institute of public health	**4**	As above	As above	As above	As above
HEALTH					
Healthy Food for all	**Combination of 4 and 2**	– taking the social gradient into account			– starting with a pilot basis using "clusters" of schools – educational activities
Stockholm centre for public health	**4**		– segmentation of EU fruit market – impact on fruits price		

(3) Answers to Question 3 – Is there any other option?

Consulted party	Is there any other option?
PUBLIC	
Department of Health Promotion (Ireland)	Sustainable funding for exiting projects currently running on a pilot basis and with yearly budgets.

(4) Other comments

Consulted party	Comment
Freshfel	Freshfel is concerned that in the course of the consultation the document for impact assessment has been modified on an important element affecting mainly option 4 and its financing. Such a revision is biasing the consultation process as indeed some stakeholders will provide or will have provided their views on the basis of the initial document and only some on the basis of the revised document. The modifications do not seem to be for the sake of "greater clarity" but fundamentally alter the terms of functioning of particularly option 4. On such basis the outcome of this consultation might not be entirely accurate.
UK fresh produce consortium	We note that substantial changes have been made to the proposals partway through the consultation process and since the original drafting of this response, and we are disappointed in this unacceptable lapse in procedures. The original consultation document, published in December 2007, contained some clear and promising proposals, in particular those under option 4, which have been undermined by the subsequent changes made to the consultation document We reject the notion that the industry should be required to fund a new school fruit scheme for a number of reasons. Fundamentally, this was not part of the original proposal as referred to above. Importantly, however, we believe that the proposals under the new option 4, of requiring the industry to cofinance any new initiatives, would have little or no success. The low margins under which the industry operates mean that spare cash is simply not available to fund such initiatives. The success of such a project, if industry funding were a fundamental element of it, would certainly not be guaranteed and we reject this mischievous modification by the Commission. Finally, we are deeply concerned that a scheme which is likely to have such far-reaching public benefits should be expected to be funded by private industry. To make such a fundamental amendment to the proposed options runs against the spirit of public consultation. Our response to this consultation has been amended to reflect these changes but we are disappointed that the Commission saw fit to make these changes in this way. This modification could have an impact on the outcome of the consultation due to some respondees having already responded to the proposals made under the original consultation paper. Again, this thoroughly undermines the whole consultation procedure.

ANNEX 7: CONSULTATION STATISTICS

Country	Agri-food sector	Health	Public	Civil society	Number of contributions
Belgium	0	2	1	0	3
Bulgaria	0	0	1	0	1
Denmark	1	1	1	0	3
Estonia	0	1	0	0	1
Finland	1	3	1	0	5
France	17	0	3	0	20
Germany	4	1	2	0	7
Hungary	0	0	1	0	1
Ireland	4	8	1	6	19
Italy	1	0	0	0	1
Latvia	0	0	1	0	1
Luxembourg	0	0	0	1	1
Netherlands	7	2	1	0	10
Norway	0	0	0	1	1
Poland	2	1	1	0	4
Slovakia	0	1	0	0	1
Slovenia	0	2	3	0	5
Spain	5	0	0	0	5
Sweden	0	1	1	2	4
UK	4	6	1	2	13
Europe	11	4		1	16
Total	**57**	**33**	**19**	**13**	**122**

Preferred options

	Option 1	Option 2	Option 3	Option 4	Options 4&2	Options 4&3	Options 4&3&2	General support
Agri-food sector	0	1	2	20	22	7	2	3
Health	0	0	2	16	9	2	0	4
Public	1	0	3	8	4	2	0	1
Civil society	0	0	2	2	5	0	0	4
Total	**1**	**1**	**9**	**46**	**40**	**11**	**2**	**12**

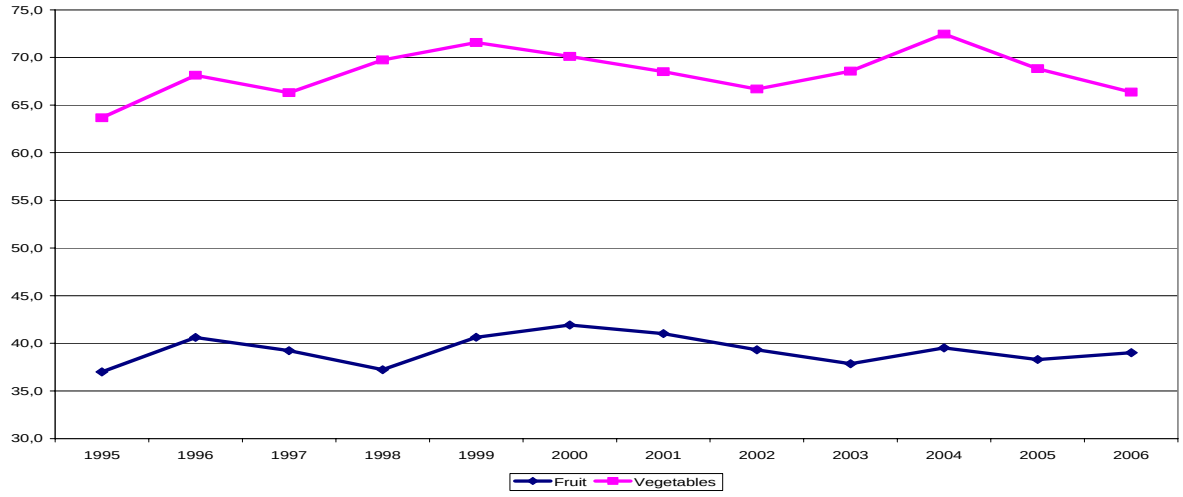
ANNEX 8: Economic dimension

Within the economic dimension, three components can be identified: stagnating production, increasing imports, and stagnating consumption.

- **Supply**

In the last ten years, average production was 68 Mio t for vegetables and 39 Mio t for fruit. There is no clear trend for the vegetable sector which in the period varies within the range of 64-73 Mio t. It reached a peak in 2004 and decreased subsequently for the two following years. For fruit, a declining trend since the beginning of the years 2000 is more apparent, with an annual average level of 1%.

Evolution of EU-27 production of fruit and vegetables (Mio tonnes)



Source: FAO[20]

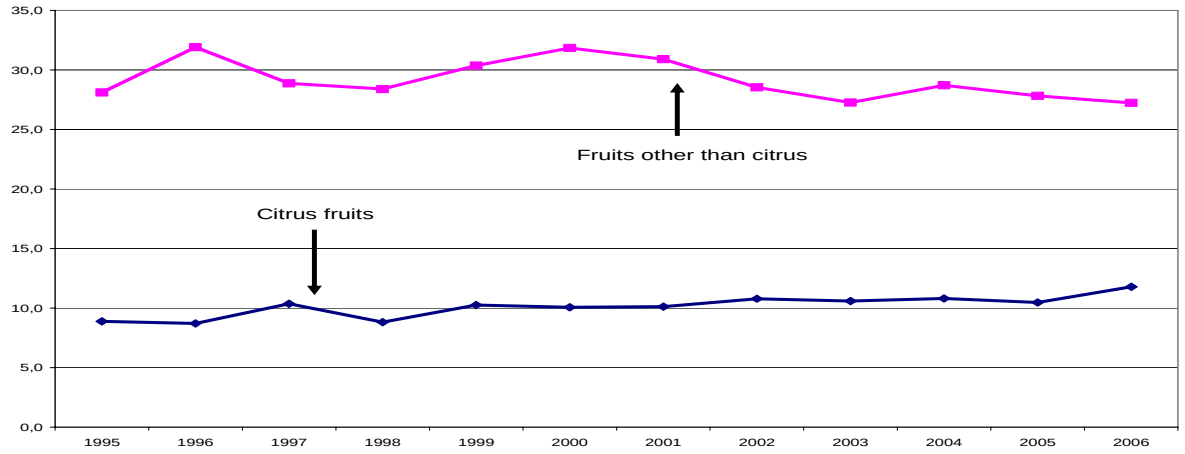
As an example to demonstrate the underlying trends of production in the fruit sector one can use the citrus sector:

This sector has grown rather dynamically for two reasons in particular: an increase in demand in the new Member States since the beginning of the 1990s and the strong development of the segment of small citrus fruits (the so-called 'easy peelers'). This means that taking changing consumer preferences into consideration can help to increase market shares. Hence citrus fruit production has increased in volume at the annual average rate of growth of 2.3% in the period 2000–2006, whereas production of the other fruits has declined by the annual rate of 2.2%.

Other examples in this context are cherry tomatoes, for which in the Netherland (export rate of 90%), the production of all kinds of cherry tomatoes has doubled in the last four years.

Evolution of production in the fruit sector (Mio tonnes)

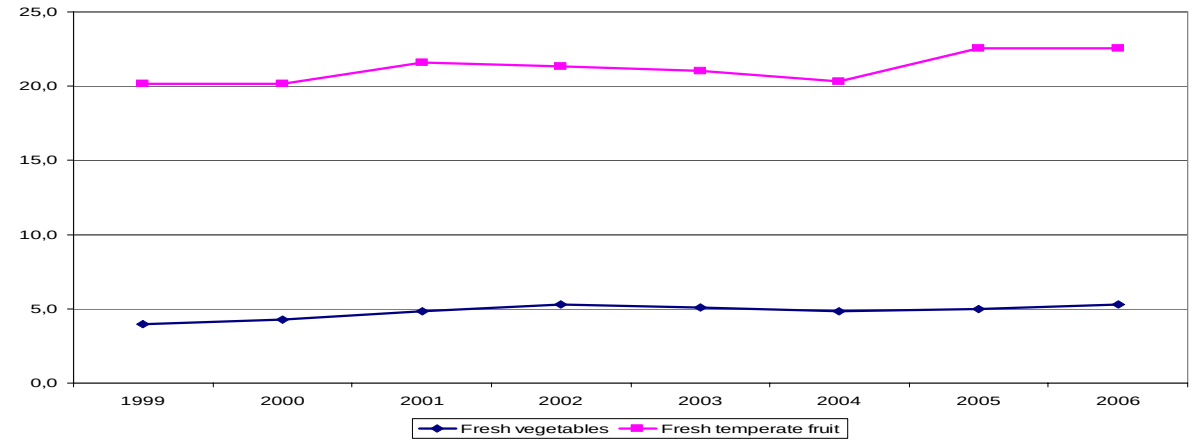
[20] FAO aggregate "fruit" minus grapes for wine (Eurostat) and FAO aggregate "vegetables". The FAO aggregate for fruit does not include nuts, melons and watermelons. The FAO aggregate for vegetables includes mushrooms, melons and watermelons.



Source: elaborated from FAO and EUROSTAT data

Trade with third countries plays an increasing role in the fruit and vegetable supply chain. The share of imports from third countries in the apparent domestic utilisation[21] of the EU-27 has increased for both fresh vegetables and fresh temperate fruit[22], however from a higher level for fresh temperate fruits: it has increased from 4.4% in average in 1999 to 2001 to 5.0% in average in 2004 to 2006 for fresh vegetables whereas for fresh temperate fruits it has increased from 20.6 in 1999–2001 to 21.8% in 2004–2006.

Importance of imports from third countries in domestic use EU-27, % in value)



Source: elaborated from EUROSTAT data (Economic Accounts of Agriculture and COMEXT)

In the medium to long run, the role of international trade is likely to increase further with the likely diminution of EU border protection as a result of WTO trade negotiations. This impact would be more important in the case of fruits than for vegetables. For the latter, imports from third countries indeed play a much lower role in the supply chain.

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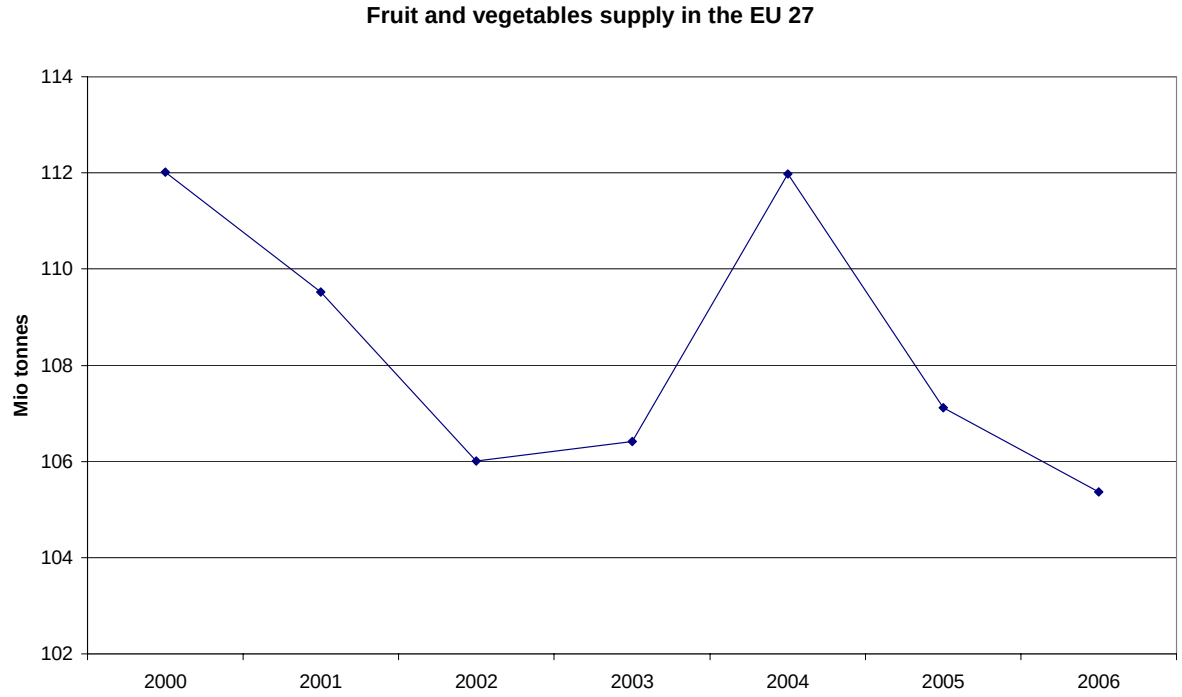
21 We only take into account here production and trade of fresh products as a rough indicator of the significance of imports in EU utilisations. It should not be considered as a complete balance sheet indicator since we do not take into account processing of EU fresh products and trade of processed products with third countries.

22 In comext: sub-chapters 0805 to 0810.

In consequence of above described developments in trade and production, total supply of fruit & vegetables supply in the EU-27 has dropped since 2000 from roughly 112 Mio tonnes to 105 Mio tonnes.



Source: elaborated from FAO and COMEXT data

- **Demand**

There are no long term consolidated times series available to allow a precise measure of the evolution of consumption at EU level. Only partial information is available at the macro level (balance sheets) for the Member State whereas at the micro level household survey methodologies, coverage and results may vary substantially (and results are not available at the level of the EU).

Rough measures, such as gross per capita consumption calculations performed by Freshfel over the period 1998–2005, show a declining trend at EU-25 level for both fruits and vegetables since the beginning of the year 2000. The data of the newest edition of the 'Freshfel consumption monitor 2007' indicate a further decrease in both fruit & vegetables gross consumption.

Balance sheets elaborated by the Commission shed some light for a few products. They would suggest a stable apparent consumption in the last years (total fresh and processed in fresh equivalent) for apples (25 kg/cap) and pears (6 kg/cap). Apparent consumption of fresh tomatoes would have declined from around 15 kg/cap in the beginning of the 2000s to around 14 in the last three years.

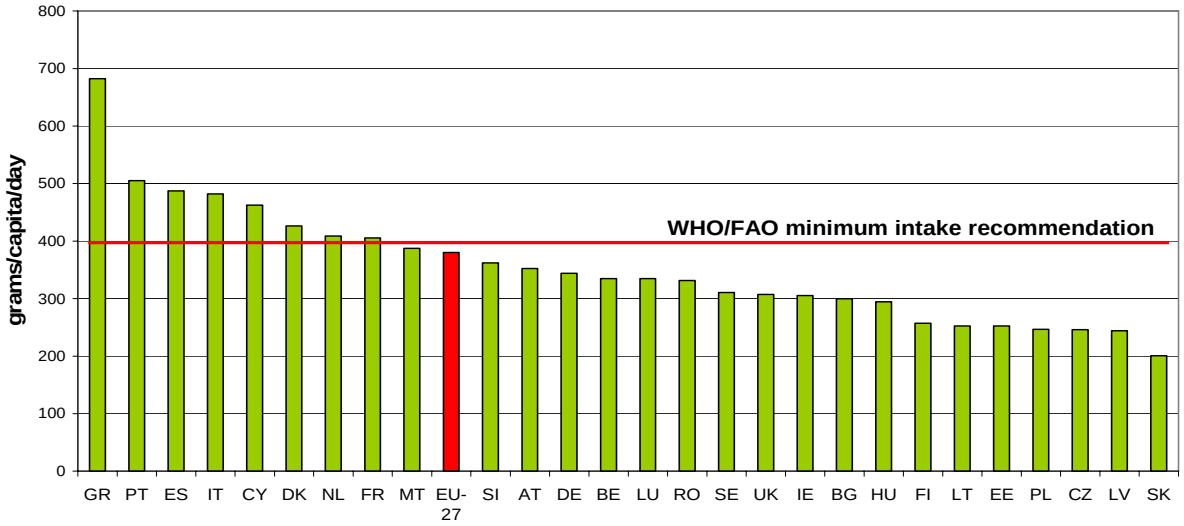
A second indicator for comparative reasons can be elaborated from the total supply. In order to determine the total gross supply, one can compare statistics on the production, export and import of fruits and vegetables in the EU-27[23].

It needs to be borne in mind that, in the discussions related to the consumption of fruit and vegetables, it is not always clear whether reference is made only to the fresh sector or whether processed fruit and vegetables are also taken into consideration. Indeed, if consumption is at most stable in the fresh sector, in the processing sector the situation can be different and there are several instances of growing subsectors: fruit-based drinks (e.g. sustained increase of consumption of orange juice), tomato-based products, etc.

Looking at the average consumption in the Member States, based on WHO data, the average apparent consumption, which again is calculated based on the total supply of fruit and vegetables, for EU-27 Member states is 380 grams per capita per day.

Furthermore, an estimate of the effective intake of fruit and vegetables can be made taking into account the inevitable waste of produce occurring between the production and distribution stages (around 20% of the product, according to sector estimates). The figures show that only eight countries across the EU reach the WHO minimum recommendation of 400 grams of fruit and vegetable net intake per day. The difference between the Member states with the highest apparent consumption rate (Greece) and the lowest one (Slovakia) is fourfold.

Apparent Consumption of fruit & vegetables in EU-27



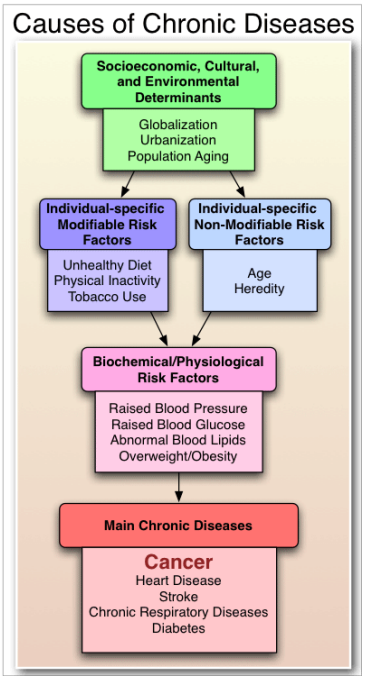
Source: DG AGRI/C.2 estimates elaborated on basis of WHO and FRESHFEL data

[23] The total supply is calculated as follows: Total supply = total EU production* + total imports** – total exports** (*Source: FAOSTAT data - **Source: EUROSTAT data). The data needs to be adjusted because FAOSTAT headings do not coincide exactly with EUROSTAT CN codes.

ANNEX 9: HEALTH DIMENSION

Within the framework of the interservice consultation, the Commission services have received a comprehensive scientific paper elaborated jointly by the Suhr's University College (Copenhagen, Denmark), European Heart Network (Brussels, Belgium), Department of Prevention and Documentation Danish Cancer Society, London School of Hygiene and Tropical Medicine and the International Obesity Task Force. This paper constitutes a basis for this part of the paper.

BURDEN OF NON-COMMUNICABLE DISEASES IN THE EU



Non-communicable diseases (NCD) are currently one of the greatest threats to public health in the European Union (Daar et al. 2007). Cancer, Heart Disease, Stroke and Diabetes are major causes of premature death in the EU. Figure 1 shows the etiology of Chronic Non-Communicable diseases (NCDC). Unhealthy diet is one of the major modifiable risk factors along with physical Inactivity and tobacco use. NCDs account for some 86% of deaths and 77% of the disease burden in the WHO European Region, which is particularly alarming given the fact that these diseases are largely preventable (WHO 2006).

Obesity

Obesity is now reaching epidemic levels in many parts of the world[24]. In the EU-25 alone, more than 50% of the adult population is overweight or obese[25]. The number of children and adolescents who are overweight and obese is also increasing. It is estimated that in the EU-25 approximately 22 million children are overweight, while 5.1 million of these children are obese. Conservative estimates suggest that the number of obese children will increase by 0.4 million per year in the EU-25[26].

Obesity is not equally distributed in society, but tends to cluster in lower socio-economic groups (SEGs) within member states (MS), and MS with higher levels of social inequality are likely to have the highest prevalence of obesity, especially among adolescents and children[27].

While obesity itself is a chronic disease, it is also a major risk factor for developing other chronic disease such as, type 2 diabetes, cardiovascular diseases (CVD), and cancer[28]. The relative risk of health problems associated with obesity is summarized in table 1.

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24 Wang, Y. & Lobstein, T. 2006, "Worldwide trends in childhood overweight and obesity", *Int.J.Pediatr.Obes.*, Vol. 1, No 1, pp. 11-25.

25 Lobstein, T. & Millstone, E. 2007, "Context for the PorGrow study: Europe's obesity crisis", *Obes.Rev.*, Vol. 8, Suppl. 2, pp. 7-16.

26 Jackson-Leach, R. & Lobstein, T. 2006, "Estimated burden of paediatric obesity and co-morbidities in Europe. Part 1. The increase in the prevalence of child obesity in Europe is itself increasing", *Int.J.Pediatr.Obes.*, Vol. 1, No 1, pp. 26-32.

27 Roskam, A. J. R. & Kunst 2007a, "European overview of educational disparities in diabetes and the role of obesity," in *Tackling Health Inequalities In Europe: An Integrated Approach. Eurothine final report*, Depatment of Public Health, University Medical Centre Rotterdam, Rotterdam, pp. 385-402.

Table 1: risk of health problems associated with obesity (WHO 2000)

Greatly increased (relative risk much greater than 3)	Moderately increased (relative risk 2–3)	Slightly increased (relative risk 1–2)
NIDDM	CHD	Cancer (breast cancer in postmenopausal women, endometrial cancer, colon cancer)
Gallbladder disease	Hypertension	Reproductive hormone abnormalities
Dyslipidaemia	Osteoarthritis (knees)	Polycystic ovary syndrome
Insulin resistance	Hyperuricaemia and gout	Impaired fertility
Breathlessness		Low back pain due to obesity
Sleep apnoea		Increased risk of anaesthesia complications
		Fetal defects associated with maternal obesity

[a] All relative risk values are approximate.

As shown, obesity is strongly associated with developing type 2 diabetes, and it is estimated that the risk is increased 20 times with a BMI larger than 35 kg/m^2 (WHO 2007). In addition, the risk of developing dyslipidaemia and hypertension is greatly and moderately increased, respectively, with obesity. Both conditions are risk factors for developing CVD. Furthermore, it is estimated that the risk of cancer could be substantially reduced if healthy weight (21–23 BMI) is maintained[29]. Being obese in childhood and adolescence is also likely to be related with additional health problems such as fatty liver and asthma as well as psychological and social problems[30].

Besides the physiological and health problems related to obesity, it is also a burden on the EU economy, as obesity now is responsible for up to 6% of total health sector bills in EU MS[31]. The International Obesity Task Force (IOTF) has estimated the cost of obesity in Europe EU-25 to be approx. € 150 billion in health care costs and lost productivity.

Cardiovascular Disease (CVD)

CVD is the number one cause of death among women and men in Europe. It accounts for almost half of all deaths in the EU-27 causing more than 2 million deaths each year, and is estimated to cost the EU economy € 192 billion/year[32]. In addition, 1.11 million children and

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[28] Bazzano, L. A. 2005, Dietary intake of fruit and vegetables and risk of diabetes mellitus and cardiovascular diseases., World Health Organization, Geneva.

[29] WCRF/AICR 2007, Food, Nutrition, Physical Activity, and the Prevention of cancer: a Global Perspective, WCRF/AICR, Washington DC.

[30] Lobstein, T., Baur, L., & Uauy, R. 2004, "Obesity in children and young people: a crisis in public health", *Obes.Rev.*, Vol. 5 Suppl 1, pp. 4-104.

[31] Knai, C., Suhrcke, M., & Lobstein, T. 2007, "Obesity in Eastern Europe: an overview of its health and economic implications", *Econ.Hum.Biol.*, Vol. 5, No 3, pp. 392-408.

[32] European Heart Network 2008, *European cardiovascular disease statistics 2008*, European Heart Network, Brussels.

adolescents are affected by hypertension, whilst 1.12 million have raised levels of total cholesterol, which both are risk factor for CVD[33].

The burden of CVD is unequally distributed among the EU MS. Death rates from coronary heart disease (CHD) and stroke are higher in Central and Eastern Europe than in Northern, Southern and Western Europe. For example: in Bulgaria CVD causes 62% of all deaths in men whereas in France the figure is 26%; 71% of female deaths in Bulgaria are from CVD whereas in France, only 31% of female deaths are from CVD[34].

Cancer

Europe (UN EU-38) only comprises one eighth of world population yet in terms of cancer burden accounts for one quarter of the global total cancer cases – 3.2 million new patients a year[35]. It is estimated that the disease caused 2.3 million new cases and over 1 million deaths in the EU-25 in 2006[36]. In addition, the overall cancer incidence and mortality rates vary at least two-fold between European countries, with greater differences for specific cancers. Although it is not possible to generalize the disease pattern of cancer in Europe, it is estimated that cancer also contributes to the health gap between new and old EU MS. There is strong association between the risk of cancer and age, meaning that the burden of cancer is increasing as European populations age[37]. In contrast, there will be greatly increased risk of certain cancers in the young adult population due to obesity and high calorie intake in childhood[38].

Diabetes

The prevalence of diabetes mellitus (both type 1 and 2) was estimated to account for a total of 355 642 deaths the EU-27 in 2003 (Diabetes Atlas – http://www.eatlas.idf.org/). The prevalence of diabetes is higher in the eastern European countries than in the southern and northern countries, 9.4, 7.8 and 7.2%[39], respectively, while the western countries have the lowest prevalence with 6.3%. Estimates suggest that by 2025 the prevalence of diabetes will have increased in all regions, but trends will remain the same with the Eastern countries having the highest prevalence followed by the Southern and Northern countries, 11.1, 9.2 and 8.6%[40], respectively, and Western countries will have the lowest prevalence of 7.6%. As with other the burden of type 2 diabetes is not equally distributed in society as prevalence is higher in lower

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33 Lobstein, T. & Jackson-Leach, R. 2006, "Estimated burden of paediatric obesity and co-morbidities in Europe. Part 2. Numbers of children with indicators of obesity-related disease", *Int.J.Pediatr.Obes.*, Vol. 1, No 1, pp. 33-41.

34 European Heart Network 2008, *European cardiovascular disease statistics 2008*, European Heart Network, Brussels.

35 Institute of Public Health of the Republic of Slovenia 2008, *Responding to the Challenge of Cancer in Europe*, Institute of Public Health of the Republic of Slovenia, Ljubljana.

36 Ferlay, J., Autier, P., Boniol, M., Heanue, M., Colombet, M., & Boyle, P. 2007, "Estimates of the cancer incidence and mortality in Europe in 2006", *Ann.Oncol.*, Vol. 18, No 3, pp. 581-592; Pomerleau, J., Lock, K., & McKee, M. 2006, "The burden of cardiovascular disease and cancer attributable to low fruit and vegetable intake in the European Union: differences between old and new Member States", *Public Health Nutr.*, Vol. 9, No 5, pp. 575-583.

37 Ferlay, J., Autier, P., Boniol, M., Heanue, M., Colombet, M., & Boyle, P. 2007, "Estimates of the cancer incidence and mortality in Europe in 2006", *Ann.Oncol.*, Vol. 18, No 3, pp. 581-592.

38 Lobstein, T., Baur, L., & Uauy, R. 2004, "Obesity in children and young people: a crisis in public health", *Obes.Rev.*, Vol. 5 Suppl 1, pp. 4-104.

39 Adapted from the Diabetes Atlas http://www.eatlas.idf.org/

40 Ibid.

SEGs. This inequality in distribution between SEGs is due to the strong association between obesity and type 2 diabetes[41].

Type 2 diabetes has historically been associated with adults and aging, but there has recently been an increased prevalence of type 2 diabetes among children and adolescents, and early onset of type 2 diabetes has been reported in children down to eight years of age[42]. Type 2 diabetes is directly linked to obesity and nearly 27 000 of the obese children in the EU-25 are suffering from type 2 diabetes, while over 400 000 have impaired glucose tolerance, and 1.72 million have raised levels of insulin[43]. Both conditions indicate early stages of Type 2 Diabetes[44]. Diabetes increases the risk of CVD by two to four folds, than the risk of the general population[45] (International diabetes federation 2003).

FRUIT, VEGETABLE AND PREVENTION OF NCDS

There is convincing evidence that increasing fruit and vegetable consumption reduces the rate of CVD[46], some cancers[47] and it has been linked with reducing rates of overweight and obesity[48]. The recent WCRF report also highlights the importance of increasing fruit and vegetable consumption, not only because it has a probable direct effect on specific site cancers, but because fruit and vegetables play an important role in reducing energy density while at the same time contributing to dietary quality[49]. Because of fruit and vegetables high content of nutrients, fiber, water and low energy density, a recommended intake of fruit and vegetable (600 g/day) or higher intake is an important strategy in maintaining a healthy body weight and in obesity prevention. A number of studies suggest that fruit and vegetable have a positive effect on satiety and reductions in dietary energy density[50]. Table 2 summarizes etiological factors related to weight gain and obesity and the strength of evidence.

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41 Roskam, A. J. R. & Kunst 2007a, "European overview of educational disparities in diabetes and the role of obesity," in *Tackling Health Inequalities In Europe: An Integrated Approach. Eurothine final report*, Department of Public Health, University Medical Centre Rotterdam, Rotterdam, pp. 385-402.

42 International diabetes federation 2003, *Diabetes Atlas – executive summary, second edition*, International diabetes federation.; Lobstein, T., Baur, L., & Uauy, R. 2004, "Obesity in children and young people: a crisis in public health", *Obes.Rev.*, Vol. 5 Suppl 1, pp. 4-104.

43 Lobstein, T. & Jackson-Leach, R. 2006, "Estimated burden of paediatric obesity and co-morbidities in Europe. Part 2. Numbers of children with indicators of obesity-related disease", *Int.J.Pediatr.Obes.*, Vol. 1, No 1, pp. 33-41.

44 WHO 2003, Diet, Nutrition and the Prevention of Chronic Diseases. Report of a Joint WHO/FAO Expert Consultation, World Health Organisation, Geneva, 916.

45 International diabetes federation 2003, *Diabetes Atlas- executive summary, second edition*, International diabetes federation.

46 Hu, F. B. & Willett, W. C. 2002, "Optimal diets for prevention of coronary heart disease", *JAMA*, Vol. 288, No 20, pp. 2569-2578.

47 WCRF/AICR 2007, Food, Nutrition, Physical Activity, and the Prevention of cancer: a Global Perspective, WCRF/AICR, Washington DC.

48 Bazzano, L. A. 2005, Dietary intake of fruit and vegetables and risk of diabetes mellitus and cardiovascular diseases., World Health Organization, Geneva; Tohill, B. C. 2005, Dietary intake of fruit and vegetable and management of body weight, WHO, Geneva.

49 WCRF/AICR 2007, Food, Nutrition, Physical Activity, and the Prevention of cancer: a Global Perspective, WCRF/AICR, Washington DC.

50 FAO/WHO 2004, *Fruit and vegetables for health*, FAO/WHO, Geneva; Rolls, B. J., Ello-Martin, J. A., & Tohill, B. C. 2004, "What can intervention studies tell us about the relationship between fruit and vegetable consumption and weight management?", *Nutr.Rev.*, Vol. 62, No 1, pp. 1-17.

Table 2: Risk Factors for overweight and obesity (WH0 2004).

Evidence	Decreased risk	No relationship	Increased risk
Convincing	• Regular physical activity • High dietary intake of non-starch polysaccharides (dietary fibre) • Fruits		• Sedentary lifestyles • High intake of energy-dense micronutrient-poor foods
Probable	• Home and school environments that support healthy food choices for children		• Heavy marketing of energy-dense foods and fast-food outlets • High intake of sugars-sweetened soft drinks and fruit juices
Possible	• Breastfeeding • Low glycaemic index foods	• Protein content of diet	• Adverse socioeconomic conditions (in developed countries, especially for women) • Large portion sizes • High proportion of food prepared outside the home (developed countries) • "Rigid restraint/periodic disinhibition" eating patterns
Insufficient	• Increased eating frequency		• Alcohol

Burden of CNCD associated with low fruit and vegetable consumption

Low fruit and vegetable intake has been associated with a number of CNCDs, especially CVD, cancer and strokes. The World Health Report[51] estimated that low fruit and vegetable intake accounted for 7.5% of mortality in developed countries and the burden of disease was 3.9%, measured in DALYs. A study that specifically examined the effect of increasing fruit and vegetable consumption in Europe concluded that if consumption of fruit and vegetables were to increase from current levels to recommended levels (400 and 600 g/day), the total burden of CVD and cancer is likely to decrease by 0,7% and 1,7%, respectively, in the EU-15 and by 1,9% and 3,6% in the EU-10[52]. The potential lives saved in EU-15 and EU-10, respectively, if intake were to increase to recommended levels, is shown in table 3[53].

[51] WHO 2002, The World health report: 2002: Reducing risks, promoting healthy life, World Health Organization, Geneva.

[52] Pomerleau, J., Lock, K., & McKee, M. 2006, "The burden of cardiovascular disease and cancer attributable to low fruit and vegetable intake in the European Union: differences between old and new Member States", *Public Health Nutr.*, Vol. 9, No 5, pp. 575-583.

[53] Idem.

Table 3: Lives saved by increasing fruit and vegetables to recommended intakes (400 g/day and 600 g/day) for specific NCD's in EU-15 and EU-10 (Pomerleau, Lock, & McKee 2006).

	EU-15			EU-10		
	Males	Females	All	Males	Females	All
Total population	*185 099 920*	*193 957 820*	*379 057 740*	*35 945 990*	*38 549 213*	*74 495 203*
Ischaemic heart disease						
400 g person^{-1} day^{-1}	17 265	11 942	29 207	8204	5877	14 081
600 g person^{-1} day^{-1}	45 083	34 181	79 264	18 368	13 936	32 303
Ischaemic stroke						
400 g person^{-1} day^{-1}	3072	4109	7181	1249	1661	2911
600 g person^{-1} day^{-1}	8331	12 040	20 371	2989	4080	7068
Lung/bronchus/trachea cancer						
400 g person^{-1} day^{-1}	3518	1048	4566	1357	418	1774
600 g person^{-1} day^{-1}	9392	3049	12 441	3102	959	4061
Stomach cancer						
400 g person^{-1} day^{-1}	1202	718	1920	490	322	812
600 g person^{-1} day^{-1}	3179	2068	5247	1116	737	1853
Oesophagus cancer						
400 g person^{-1} day^{-1}	807	217	1024	211	38	250
600 g person^{-1} day^{-1}	2089	626	2715	458	88	546
Colon/rectum cancer						
400 g person^{-1} day^{-1}	248	170	418	93	87	179
600 g person^{-1} day^{-1}	697	510	1207	224	205	430
All health outcomes						
400 g person^{-1} day^{-1}	26 112	18 203	44 315	11 605	8403	20 007
600 g person^{-1} day^{-1}	68 772	52 473	121 245	26 256	20 005	46 261

EU-15 – the 15 countries that were members of the European Union (EU) before May 2004; EU-10 – the 10 countries that then joined it.

The figures in table 3[54] indicate a potential health gap between the new MS (EU-10) and the old MS (EU-10), as the figures indicate that new MS would benefit the most from an increased fruit and vegetable intake, especially in terms of decreased prevalence of CVD. The health gap is further exacerbated by the difference in age at which diseases (ischemic heart disease, stroke and cancer) linked to fruit and vegetable intake occur, as these diseases have earlier onset in the EU-10, compared with the population of EU-15[55].

Fruit and Vegetable Consumption in the EU

It is estimated that less than 50% of EU citizens are reaching the recommended fruit and vegetable intake[56]. Moreover, an estimated pooled mean fruit and vegetable intake gathered from the EPIC study[57], shows an intake of 231,4 g/day[58]. Other studies indicate that children's

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54 Figures smaller in EU-10 than EU-15 due to larger population in the EU-15.

55 Pomerleau, J., Lock, K., & McKee, M. 2006, "The burden of cardiovascular disease and cancer attributable to low fruit and vegetable intake in the European Union: differences between old and new Member States", *Public Health Nutr.*, Vol. 9, No 5, pp. 575-583.

56 Lock, K., Pomerleau, J., Causer, L., & McKee, M. 2005, "Low fruit and vegetable intake," in *Comparative quantification of health risks: global and regional burden of diseases due to selected major risk factors*, M. Ezzati et al., eds., WHO, Geneva, pp. 597-728.

57 The estimation is based on pooled mean figures of total fruit and vegetables intake, in both men and women, from the European Prospective Investigation into Cancer and Nutrition (EPIC) study. The study includes intake data from Greece, Spain, Italy, France, Germany, The Netherlands, United Kingdom, Denmark, Sweden and Norway. In order to avoid pooled mean skewed figures, intake data from France, Norway, Naples (Italy) and Utrecht (The Netherlands) was excluded, as intake data from these countries/cities was only from women.

58 Agudo, A., Slimani, N., Ocke, M. C., Naska, A., Miller, A. B., Kroke, A., Bamia, C., Karalis, D., Vineis, P., Palli, D., Bueno-De-Mesquita, H. B., Peeters, P. H., Engeset, D., Hjartaker, A., Navarro, C., Martinez, G. C., Wallstrom, P., Zhang, J. X., Welch, A. A., Spencer, E., Stripp, C., Overvad, K., Clavel-Chapelon, F., Casagrande, C., & Riboli, E. 2002, "Consumption of vegetables, fruit and other plant foods in the European

and adolescents' fruit and vegetable intake does not meet recommendations. The DG SANCO financed study, Pro-children, measured fruit and vegetable intake in children, and found that less than 20% of all children reached recommended level of 400 g daily[59]. Some results of this study are summarised in Table 4.

Table 4: Mean fruit and vegetable intake in 9 countries as measured by Pro-children (Yngve, Wolf, Poortvliet, Elmadfa, Brug, Ehrenblad, Franchini, Haraldsdottir, Krolner, Maes, Perez-Rodrigo, Sjostrom, Thorsdottir, & Klepp 2005)

Country	Mean fruit and vegetable intake (excl. juice)
Austria	265
Belgium	242
Denmark	241
Iceland	143
Netherlands	204
Norway	216
Portugal	264
Spain	176
Sweden	238

Unfortunately, no recent studies that summarise fruit and vegetable intake in the EU-27 are available. However, existing evidence on fruit and vegetable intake combined with food supply statistics (see figure 2), suggest that consumption is at best stagnating and probably declining in children and adolescents.

Few studies have estimated the health cost related to low fruit and vegetable. In the Netherlands it is estimated that the cost of insufficient fruit and vegetable consumption was € 460 million in terms of health care costs[60]. Similarly, it is estimated in Denmark that the socioeconomic loss of production related to deaths due to low fruit and vegetable intake accounts for € 53 million[61]. Although no figures are available for the cost of low fruit and vegetable consumption in the EU-27, it can be assumed that these costs are appreciable, considering the relatively small size of the Netherlands and Denmark.

Increasing fruit and vegetable consumption in children

Improving children and adolescents eating habits is an important strategy for improving public health. Increased fruit and vegetable consumption can have an immediate effect in terms of

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Prospective Investigation into Cancer and Nutrition (EPIC) cohorts from 10 European countries", *Public Health Nutr.*, Vol. 5, No 6B, pp. 1179-1196.

59 Yngve, A., Wolf, A., Poortvliet, E., Elmadfa, I., Brug, J., Ehrenblad, B., Franchini, B., Haraldsdottir, J., Krolner, R., Maes, L., Perez-Rodrigo, C., Sjostrom, M., Thorsdottir, I., & Klepp, K. I. 2005, "Fruit and vegetable intake in a sample of 11-year-old children in 9 European countries: The Pro Children Cross-sectional Survey", Ann.Nutr.Metab, Vol. 49, No 4, pp. 236-245.

60 WHO 2007, The challenge of obesity in the WHO European Region and the strategies for response., WHO, Copenhagen.

61 Estimated by the Human capital method- i.e. the time span between t a person's absences from the workplace to the age of retirement due to ill-health. Juel, K., Sørensen, J., & Brønnum-Hansen, H. 2006, *Risikofaktorer og folkesundhed i Danmark*, Udarbejdet for Sundhedstyrelsen af Statens Institute for Folkesundhed, København.

maintaining healthy body weight and long term effects by reducing risk of CNCDs. Interventions targeting healthy nutrition need to occur early in childhood or adolescence in order to prevent or reverse the adverse health effects of overweight and poor eating habits[62]. Even though relatively few long-term studies that examine the effect of fruit and vegetable intake early in life on CNCD risk, the Boyd Orr Cohort in the UK has shown that children with high fruit and vegetable intake have significantly lower risk of developing stroke and cancer[63].

Healthy eating habits are formed in childhood, and studies show that fruit and vegetable intake tracks into adulthood[64]. In addition, the same studies found that high consumers of fruit and vegetables in childhood remain high consumers as adults (with some variation in adolescence), and low consumers in childhood remain low consumers as adults[65]. A longitudinal study suggests that intake of a recommended amount of fruit and vegetables in childhood, increases the prospect of eating a recommended intake in adulthood by two- to six-fold[66].

Schools seem to be an ideal arena to target increasing fruit and vegetable intake in children and adolescents. Although school systems, food cultures and school food environments vary from country to country, schools in the EU as health promotion arenas have certain common features. Ideally schools can provide a platform for combining theory and practice – i.e. learning about healthy foods in classroom and eating, tasting and experiencing healthy foods provided at schools[67]. Schools can reach almost all children and adolescents regardless of SEG during their first two decades of life[68], and are a critical part of the social environment that shape young people's behaviors[69].

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62 St Onge, M. P., Keller, K. L., & Heymsfield, S. B. 2003, "Changes in childhood food consumption patterns: a cause for concern in light of increasing body weights", *Am.J.Clin.Nutr.*, Vol. 78, No 6, pp. 1068-1073.

63 Maynard, M., Gunnell, D., Emmett, P., Frankel, S., & Davey, S. G. 2003, "Fruit, vegetables, and antioxidants in childhood and risk of adult cancer: the Boyd Orr cohort", *J Epidemiol Community Health*, Vol. 57, No 3, pp. 218-225.

64 Kelder, S. H., Perry, C. L., Klepp, K. I., & Lytle, L. L. 1994, "Longitudinal tracking of adolescent smoking, physical activity, and food choice behaviors", *Am.J.Public Health*, Vol. 84, No 7, pp. 1121-1126; Lien, N., Lytle, L. A., & Klepp, K. I. 2001, "Stability in consumption of fruit, vegetables, and sugary foods in a cohort from age 14 to age 21", *Prev.Med.*, Vol. 33, No 3, pp. 217-226.

65 idem.

66 te Velde, S. J., Twisk, J. W., & Brug, J. 2007, "Tracking of fruit and vegetable consumption from adolescence into adulthood and its longitudinal association with overweight", *Br.J.Nutr.*, Vol. 98, No 2, pp. 431-438.

67 Dixey, R., Heindl, I., Loureiro, I., Pérez-Rodrigo, C., Snel, J., & Warnking, P. 2006, *Healthy Eating for Young People in Europe- A school-based nutrition education guide*, WHO Regional Office for Europe, the European Commission and the Council of Europe, Copenhagen.

68 Glanz, K., Lankenau, B., Foerster, S., Temple, S., Mullis, R., & Schmid, T. 1995, "Environmental and policy approaches to cardiovascular disease prevention through nutrition: opportunities for state and local action", *Health Educ.Q.*, Vol. 22, No 4, pp. 512-527.

69 Parcel, G. S., Simons-Morton, B., O'Hara, N. M., Baranowski, T., & Wilson, B. 1989, "School promotion of healthful diet and physical activity: impact on learning outcomes and self-reported behavior", *Health Educ.Q.*, Vol. 16, No 2, pp. 181-199.

ANNEX 10: SOCIAL DIMENSION

The issue of healthy eating habits and more specifically, overweight and obesity and as a basis, the consumption of fruit & vegetables, has a reflection in the social dimension: there is a higher impact of expenditure for fruit & vegetables for lower income groups of society and in the poorer Member states.

According to EUROSTAT data of 2005[70], the population in EU-25 in risk of poverty was approx. 16% of the overall population, with 8% being at risk although being still employed. Out of the 78 million European living at risk of poverty, 19 million are children.

However, it is not possible to establish a general measurement for poverty which means that both the number of people who are at risk as well as the threshold defining when somebody is at risk vary considerably. The average threshold ranges between € 1.400/month in Luxemburg and € 61/month in Romania.

Poverty has a direct effect on consumption patterns: As scientific literature[71] based on empirical studies has shown households with budget constraints alter the composition of foods in direction of more calorie-dense sugars and fats, away among others from fruit & vegetables. This reflects the most cost-effective way to purchase calories.

Food expenditure

Another factor for assessing the link between social status and consumption patterns can be established by looking at the share of expenditure on food as part of the total household expenditure.

By classifying the Member states in three groups according to the Gross Domestic Product (GDP) per capita in relation to the average EU-27 GDP, differences in the percentage of expenditure spend on food become visible. The classification of Member states per GDP follows the model applied in the European Union regional intervention models, such as the definition of convergence regions.

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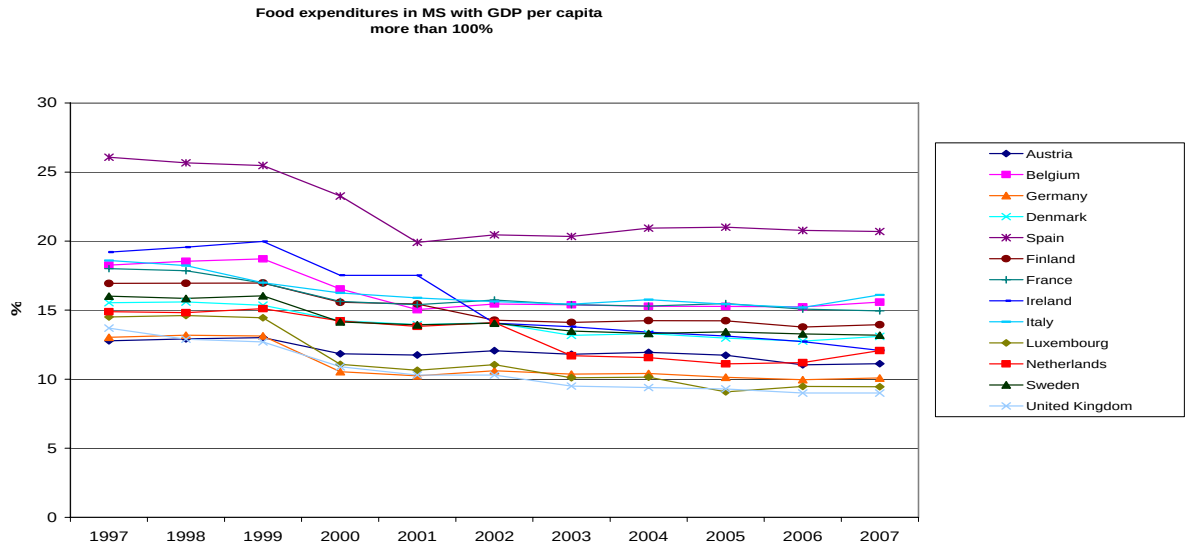
[70] Households whose income is less than 60% of the national equivalised median after social transfers

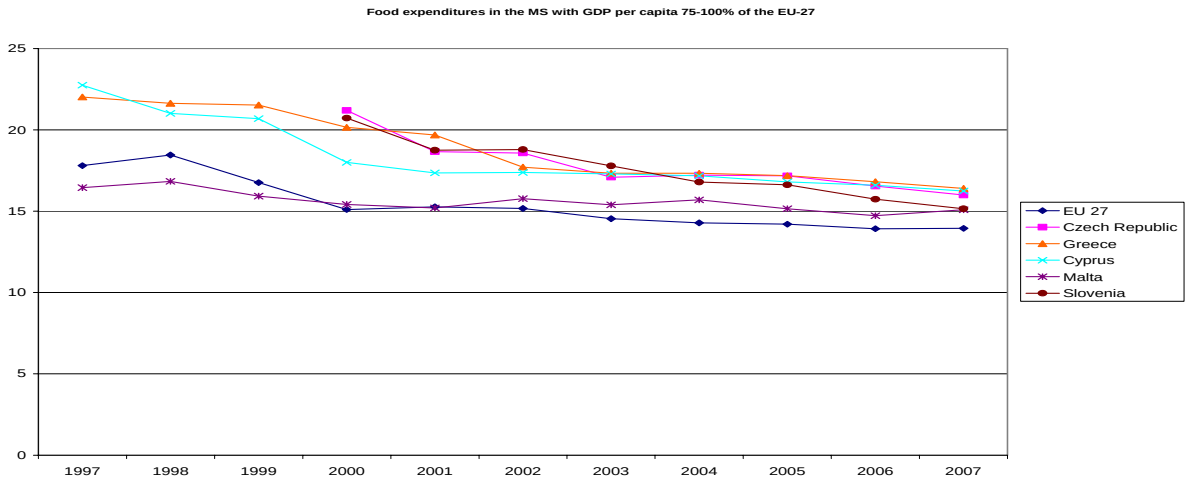
[71] Ford Runge C. 2007, *The economic consequences of the obese – Working paper,* Centre for international food and agricultural policy, p. 7



Source: elaborated from EUROSTAT data

The group of high GDP consists of thirteen Member states, which in average spend 16% of total household expenditure on food and non-alcoholic beverage.

In the second group, which also contains the average EU-27 together with five Member states, a significant drop in the percentage of household expenditure on food can be observed, the EU average dropping from roughly 18% to 14% in the years 1997 to 2007.

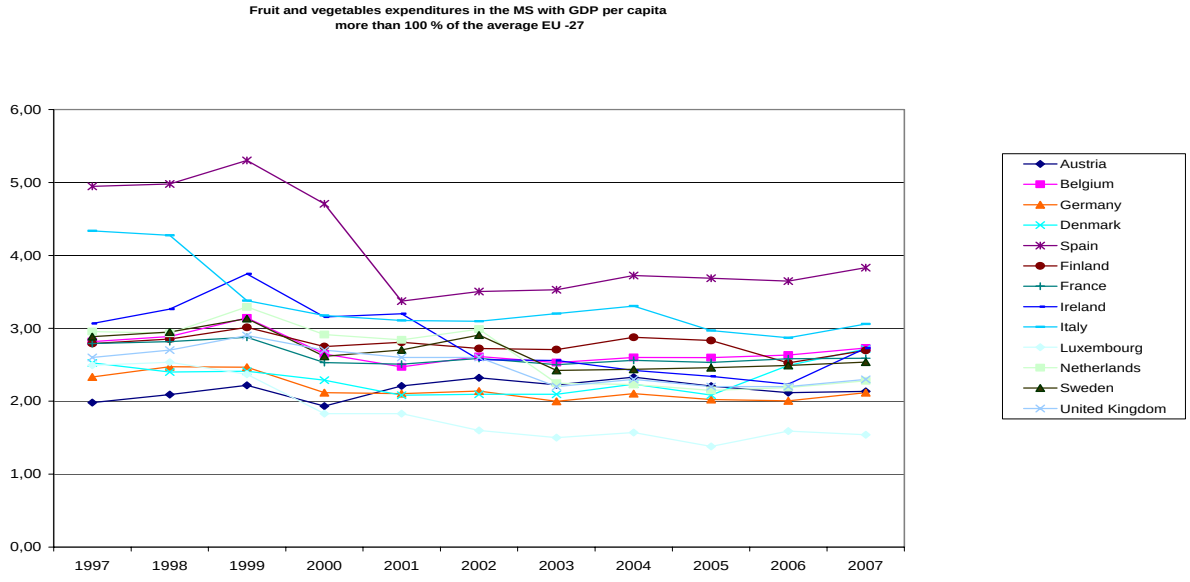


Source: elaborated from EUROSTAT data

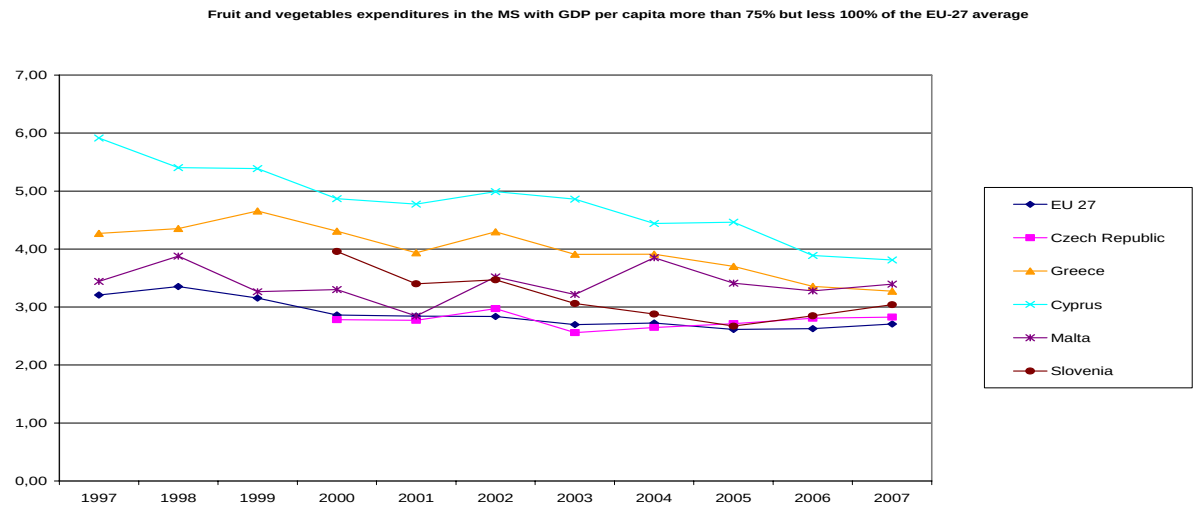
Source: elaborated from EUROSTAT data

The third group of Member states is made up of nine Member states, of which eight have only recently joined the EU. There total share of household expenditure for food and non-alcoholic beverages, although also demonstrating a significant drop, is still on average higher than 25%.

The same data, but this time only for the expenditure in fruit & vegetables, for the same groups of Member states, is the following:

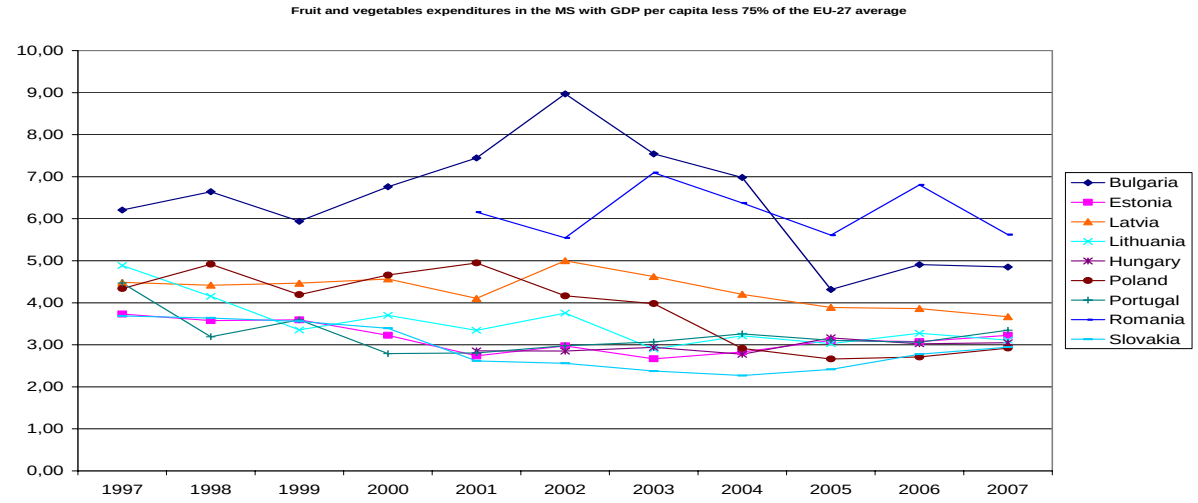


Source: elaborated from EUROSTAT data



Source: elaborated from EUROSTAT data

With regard to expenditure on fruit & vegetables as part of the total household expenditure per three groups of Member states, the differences are not as explicit as with the total food expenditure. Actually, the EU average settles around 3.2% in 1997 and 2,8% in 2007. However, the expenditure shows a higher volatility than the one for food, reflecting the reality as such of the fruit & vegetables market. Nevertheless, the difference between the richest and the poorest groups of Member states remains between 3% and 5% for the period of eleven years.

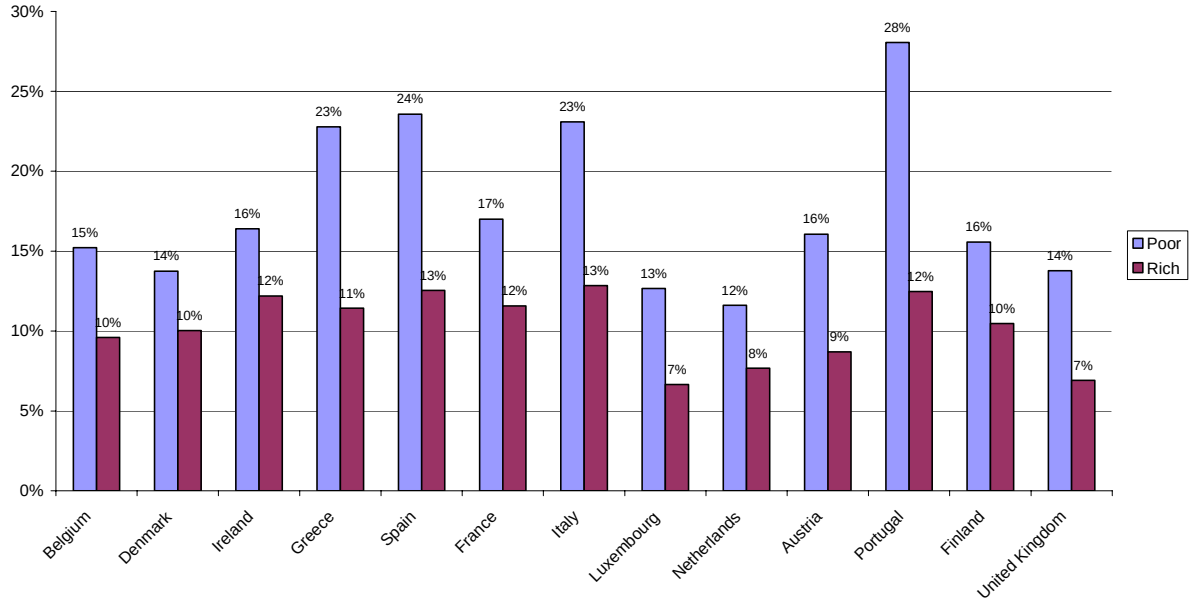


Source: elaborated from EUROSTAT data

Food expenditure and elasticity

An indicator for the link of the social status to consumption patterns can be identified if looking at the **disposable income** at the level of individual households per Member state.

Percentage of expenditures for food on the total expenditures of poor households (first quintile) and of the households with the highest income (fifth quintile) in 1999



Source: elaborated from EUROSTAT data[72]

By sorting the households according to their disposable income, the share of expenditure for food and non-alcoholic beverages can be demonstrated for the group of the lowest and of the highest income. The difference varies between 16% (Portugal) and only 4% (Denmark, Netherlands) according to the thirteen Member states for which data is available.

Another important indicator of the linkage between income and expenditure is **price and income elasticity**. Price Elasticity of Demand (PEoD), commonly known as just price elasticity, measures the rate of response of quantity demanded due to a price change[73]. In this case, it measures the change in expenditure on food.

According to data from the Economic Research Service of the USDA 2003, (www.ers.usda.gov) on the international food consumption patterns, higher income countries demonstrate lower elasticity on both food and much more markedly, on fruit & vegetables expenditure.

In more detail, the price elasticity[74] for food, beverages and tobacco within EU-27 Member states 0.191 for Denmark and .387 for Romania. This means, the impact of a price changes for the three products is nearly double in Romania compared to Denmark.

At the same time, price elasticity for fruit & vegetables is even bigger: .167 for Denmark and .413 for Romania.

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72 Households are sorted by disposable income in rising order and are then categorized into quintiles (fifths). The first quintile consists of a fifth of households that have the lowest disposable incomes. Those households with the highest disposable incomes are placed in the fifth quintile.

73 The formula for the Price Elasticity of Demand (PEoD) is: PEoD = (% Change in Quantity Demanded)/(% Change in Price)

74 If PEoD > 1 then demand is price elastic (demand is sensitive to price changes), if PEoD = 1 then demand is Unit Elastic, if PEoD < 1 then demand is price inelastic (demand is not sensitive to price changes)

On the other hand, income elasticity – the impact of a change in income on the expenditure of fruit &vegetables – is ranging in the EU-27 between .207 in Denmark and .511 in Romania. This means, the higher the income, the lower the change in purchasing patterns if the income changes (demand is not sensitive to income changes). However, as all calculated PEoD amounts are below 1, fruit & vegetables can in general be defined as not price or income elastic.

Yet another indicator can be identified as the food budget share in different countries. For the EU-27 Member states this amount ranges (in %) between Romania with more than 20% and Denmark with close to 12%. However, given the fact that Estonia has a share of 10% while Italy is over 19%, no clear pattern can be identified between the richer and poorer Member states.

Nevertheless, the link between low household income and other social factors and insufficient expenditure on fruit & vegetables has been established by several studies.

Below is a text box on a study from the USA and from France.

One study from the USA clearly indicates that high income households spend more on fruit & vegetables than those classified as low-income. These are identified as being eligible to the benefits of the Food Stamp Program. On average, low income households spent 3.59US$ per person and per week on fruit & vegetables, while higher income households spent 5.02US*, which the authors call a significant statistical difference. However, the study also shows that high income households are more reactive to price or income changes, increasing their fruit & vegetables expenditure if possible.

On the other side, low income households set their priorities on other goods rather than fruit & vegetables when more expenditure is at disposal. In addition, household heads with higher (which means college) education spend significantly more on fruit & vegetables irrespective of the income levels. Thus, a point is made for more nutrition education, be it as part of formal education or specific nutrition-focused education

Source: 'Low-income household's expenditure on fruit & vegetables', Blisard, N., H. Stewart, D. Jolliffe, ERS/USDA 2004;

Text box: http://www.inra.fr/les_partenariats/expertise

3.1.4. Les F&L comme "marqueur social" : statut socio-économique, revenu, éducation

Les consommations de F&L sont généralement associées positivement à un statut socio-économique (SSE) élevé, défini principalement par la profession individuelle ou celle du chef de ménage. En France, les études mettent en évidence une faible consommation de F&L (surtout frais et surgelés, mais pas en conserve) et de jus de fruits, ainsi qu'une moindre variété, dans les catégories de faible SSE. De nombreux travaux dans plusieurs pays d'Europe confirment cette tendance pour les pays non méditerranéens, y compris la France. Dans les pays forts producteurs et consommateurs de F&L (Grèce, Espagne, Portugal, Pologne et Hongrie), on observe un gradient inverse, à savoir une plus forte consommation de F&L par les personnes de faible SSE.

L'influence positive sur la consommation de F&L se retrouve pour le revenu et le niveau d'éducation, 2 variables fortement associées au statut socio-économique. Plusieurs études confirment que les populations pauvres consomment moins de F&L. En France, la consommation des ménages du 1er quartile de revenu est toujours inférieure à celle de l'ensemble de la population. Les différences sont très fortes au niveau des fruits (-50%) et légumes frais, et existent aussi pour les légumes surgelés, ainsi que pour les confitures et compotes. En revanche, les légumes et fruits en conserve sont achetés en quantité équivalente.

Les études européennes montrent que les consommateurs ayant un niveau d'éducation élevé consomment plus de fruits et de légumes (et plus variés) que ceux à niveau d'éducation faible, excepté dans quelques pays méditerranéens où la consommation de F&L est plus courante. L'éducation est en effet un bon indicateur des connaissances nutritionnelles qui exercent un effet positif sur les achats de F&L et orientent le choix des produits. Des travaux américains montrent que l'impact de l'éducation peut être supérieur à celui du revenu.

D'autres travaux mettent en exergue l'importance des normes pour expliquer la différenciation de la consommation et la réaction face à la nouveauté. Les F&L, selon le produit considéré et la forme sous laquelle il est commercialisé (degré de préparation, portion, packaging...) peuvent relever d'une alimentation traditionnelle ou moderne.

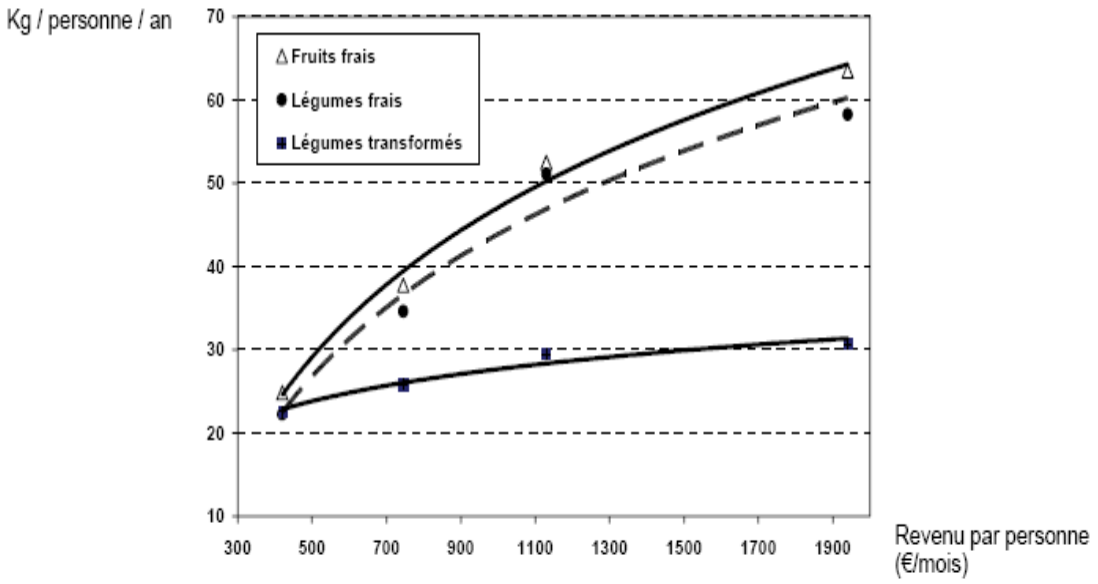


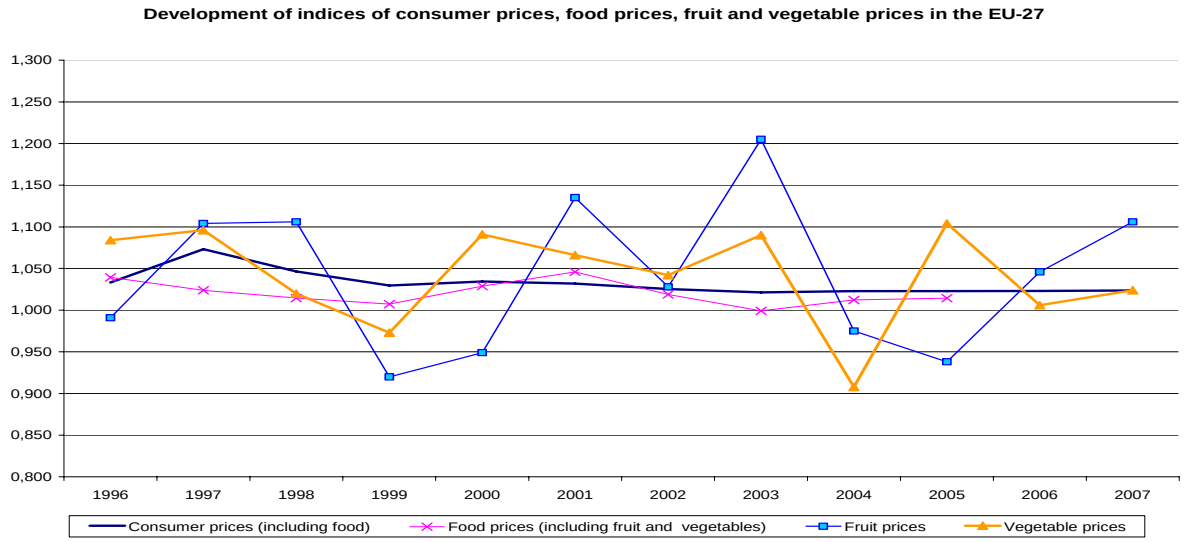
Figure 5. Effet du revenu sur les achats de F&L (2005)
(Source : TNS Worldpanel, traitement INRA)

Food price indices

There are several factors that explain the relative decline of consumption of fresh fruit and vegetables. Household purchasing power is an important element. Fruit and vegetables have

the reputation to be expensive and are often among the expenses that are cut first in case of increased constraints on household's resources.

However, looking at the development of consumer price indices, the impact of the highly volatile fruit & vegetables prices does not seem to be significant when compared to the overall expenditure on food.



Source: AGRI/C.2, elaborated from EUROSTAT data

An important aspect leading to a change in consumption patterns lies in the changes of life styles: reduction of the time available for the preparation of meals (hence higher demand for convenience), changes regarding the organisation of meals (and place: at home / outside), decreasing size of households, etc.

In a context of abundant supply, consumer demand has orientated itself towards quality, variety and convenience. The increase of consumption of ready-made meals (e.g. canned or frozen products) and fresh products (e.g. washed and cut salads) answers partly to these changes. For fresh fruit and vegetables, these changes call for an evolution of the array of products offered to the consumers (e.g. development of fresh cuts, etc.).

ANNEX 11: MEMBER STATE PROGRAMMES

	DG/ Member State	Target group (school)			Run by			Participating Sectors			Funding			Timing (years)	Implementation level			
		kindergarden	primary	secondary	Public	Private	ONG	Agri.	Education	Health	Private	Public	EU		local	regional	nat.	UE
Member States Programmes co-financed by the Commission																		
Start 2 Eat for Kids	Belgium		x		x	x		x	x	x	x		x	,,,			x	
Food Dudes – Roll Out	Ireland	x	x		x	x		x	x		x	x	x	3			x	
La frutta: un gioco da ragazzi	Italy		x	x	x	x		x	x		x	x	x	3				x
5 al dia	Spain		x		x	x		x			x	x	x	3			x	
Member States Programmes																		
Tutti Frutti	Belgium	x	x		x	x	x	x	x	x	x	x		4			x	
Fruit Break	Denmark	x	x		x	x		x	x		x	x		2			x	
Der Schulapfel	Germany	x	x	x		x		x			x				x			
Dortmunder Kinder. Besser essen. Besser bewegen			x		x	x			x			x		3	x			
Eat 3 different fruit and vegetables 3 times a day for your health	Hungary	x	x	x	x	x		x	x	x	x	x		10			x	
Healthy can also be delicious			x		x			x		x		x			x			
Frutta Snack Romagna	Italy			x	x	x		x	x		x	x		3		x		
Frutta Snack Marche				x	x	x		x	x		x	x		2		x		
Frutta Snack Nazionale				x	x	x		x	x	x	x	x		2			x	
Fattorie aperte e fattorie didattiche		x	x	x	x			x	x			x		6		x		
gesond iessen, méi bewégen	Luxembourg			x	x					x				permanent			x	
school gruiten	Netherlands		x		x	x				x	x	x		2003 ->			x	
Apple in school	Slovenia	x	x		x			x	x	x		x		permanent			x	
Talleres de Cocina Mediterranea	Spain		x		x	x		x				x		1			x	
School Fruit&Veg. Scheme	UK		x		x	x			x	x	x			3			x	
Grab 5			x		x	x	x	x	x	x		x		3	x		x	
Free Fruit in Schools initiative for primaries			x		x				x			x		4		x		

ANNEX 12: EUROPEAN COMMISSION PROGRAMMES IN SCHOOLS

	DG/ Member State	Target group (school)			Run by			Participating Sectors			Funding			Timing	Implementation level			
		kindergarden	primary	secondary	Public	Private	ONG	Agri.	Education	Health	Private	Public	EU	(years)	local	regional	nat.	UE
Commission Programmes in schools (not necesarilly linked to f&v consumption)																		
Common values	JLS			x		x			x			x	x	3				x
School Milk	AGRI																	
Shape Up	SANCO		x		x	x			x	x		x	x	3				x
Promotion of vegetable and fruit consumption of school children					x			x	x			x	x	3				x
Development and implementation of a national policy for promoting healthy eating and physical activity for schools in Europe			x		x				x	x		x	x	3				x
Various publications for rising environmental awareness for distribution in schools	ENV		x	x									x	ongoing				x
Promoting and sustaining Health through increased Vegetable and Fruit Consumption among European schoolchildren	RTD			x	x			x	x	x			x	4				x
Spring Day in Europe	COM		x	x	x				x			x	x	5	x	x	x	x
Comenius School Partnerships	EAC	x	x	x	x				x			x	x	10	x	x	x	x
eTwinning		x	x	x	x				x			x	x	10	x	x	x	x

ANNEX 13:

Given the heterogeneity of the models in place and the differences between the four options proposed, this Annex can only refer to a general assessment of SFS models.

EFFICIENCY OF SFS

Experience based evidence[75] shows a lasting increase in portions consumed by children between 0.4 and 1.1 portions per day per child.

Therefore, an SFS providing the children with one portion of fruit and vegetable every week during 30 weeks would result in an increase in consumption by 145 to 400 portions a year per child.

Scientific evidence[76] suggests that an increase of one portion of fruit & vegetables per day translates into a lower risk for CVD and other malnutrition-related disease (such as diabetes) by 30%. Moreover, direct cost of obesity is estimated to more than € 40 billion per year in the EU. Consequently, increasing the consumption of fruit and vegetable among the children would lead to important health costs savings in the long term.

BUDGETARY ESTIMATION

Option 2

The budgetary allocation for option 2 'networking' is estimated at € 1.3 Mio per year. It is based on the examples of two current activities within AGRI: The 'Organic Farming Campaign' and the external communication activities, both directly managed by AGRI. Three different measures are envisaged:

(1) Internet portal **(€ 750 000)**

Internet portal with e-based tool box of media instruments for project promoters and general public. These tools include: TV and radio spots, brochures on various subjects, links, glossary, contacts, expert database, case studies, PPT, fact sheets etc. The site is available in 22 languages.

(2) Events & tools **(€ 250 000)**

This includes Commission participation in public events such as agriculture fairs and related events, press conferences, including the launching event of the internet portal, printing and

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[75] Experience-based evidence originates from the SFS in DK, IE and UK and provides for an increase in portions consumed by children before and after (one to two years) the SFS between 0.4 and 1.1 portions per day per child

[76] Bazzano, L. A., He J., Ogden L. G., Loria C. M., Vupputuri S., Myers L., Whelton P. K., 2002, "Fruit and vegetable intake and risk of cardiovascular disease in US adults: the first national health and nutrition examination survey epidemiologic follow-up study", *The American journal of clinical nutrition* and Lock, K., Pomerleau, J., Causer, L., & McKee, M. 2005, "Low fruit and vegetable intake," in *Comparative quantification of health risks: global and regional burden of diseases due to selected major risk factors*, M. Ezzati et al., eds., WHO, Geneva, pp. 597-728.

dissemination of brochures, training and information seminars for project promoters. Again, all materials and activities are to be made available in 22 languages.

(3) Annual conference (**€ 300 000)**

An annual conference with approx. 350 participants and approx. 80 reimbursed contributors (speakers, panellist, rapporteurs, and project presenters), taking place at Commission premises in Brussels every year will be organised. The aim is to provide for a platform for know-how and experience exchange between project promoters from all over the EU-27, thus fostering the development of new initiatives while establishing a 'code of good practice' based on best practice examples to improve the design and implementation of SFS.

Option 4

This indicative calculation of the budgetary estimation is based on the three models of SFS implementation as presented in annex 14. The concrete figures are drawn from on-going SFS in several EU-27.

The experience shows that logistical costs are significantly lower for programmes providing fruit & vegetable throughout the school year on a regular basis. Moreover, economies of scale increase with larger numbers of children involved and also, if multi-annual contracts are used. For example, the cost per portion, € 0.12, is the lowest in the English programme (multi-annual framework, one portion per day to every child, 5 days a week) and the highest, € 0.63, with the Irish programme (annual contracts, two portions a day, 5 days a week for two weeks) demanding special logistic circuits.

Regarding the 'Food Dudes' programme in Ireland, it has to be said that this program is designed to be carried out once in the children's schooling, therefore the number of children concerned by the programme is lower. However, other costs include the provision of rewards and videos and the management, promotion and training costs.

Table1: Indicative cost estimates of different models of EU-wide School Fruit Schemes

	Model 1: Enticement *	**Model 2: Kick-start ****	**Model 3: Provision**	
	Twice a day	Once a day	Once a week	Twice a week
Duration (weeks)	3	10	30	30
Number of portions per child	30	50	30	60
Cost per portion	€ 0,60	€ 0,35	€ 0,20	€ 0,20
Cost per child	€ 18	€ 17,5	€ 6	€ 12
Provision cost (€ Mio) estimations				
Cost for core group (6-10)	468,0	455,0	156,0	312,0
Cost for extended group (4-12)	835,2	812,0	278,4	556,8
Cost for large group (4-16)	1254,6	1219,8	418,2	836,4

* This model requires additional funds for accompanying measures (60% of the overall budget)

** This model requires additional funds for accompanying measures (30% of the overall budget)

The estimation of the cost for option 4 is based on the 'provision model'. The reason is that this model provides for the largest scope of the three models, thus allowing for an implementation of the two other models if a Member states so chooses. In that case, the same amount of fruit & vegetables would be distributed in a shorter time span and more frequent intervals than in the provision model.

The basis of the calculation is provided by the English School Fruit and Vegetable Scheme, which has been running for several years now and duly been evaluated as reaching a sustainable increase in fruit and vegetables consumption by school children. This scheme delivers one portion per day to the children and therefore allows for high economies of scale, reducing the price per portion to € 0.12.

Given the fact that in EU SFS only a weekly, not a daily, distribution of fruit and vegetables is foreseen, the calculation is based on a higher cost per portion of € 0.20. This price of a portion includes logistical costs.

An SFS delivering to all the 26 million children aged 6-10 in the EU one portion of fruit and vegetables per week during 30 weeks would cost € 156 million for the purchase and the distribution of the produce.

The co-financing rate is 50% (75% in convergence regions). According to Eurostat data, 31% of the population lives in convergence regions. Therefore the average co-financing rate is (75*0.31 + 50*0.69) = 57.75% and the cost supported by the EU is € 90 million.

ANNEX 14: ADMINISTRATION

There are four different elements to the assessment of the administrative impact of the School Fruit Schemes. Given the heterogeneity of the models in place and the differences between the four options proposed, this chapter can only refer to a general assessment of SFS models.

i. Existing models of SFS

Basically, three different models can be distinguished.

Enticement programme:

- Aims at exposing children of the target group in a very brief period (17 days) to a maximum of fruit & vegetables and healthy diet related information. This also includes the free distribution of fruit & vegetables as part of the program.
- Approach: Close cooperation with education and health sector in providing information to children and parents as well as training to teachers;
- Follow-up: Children are encouraged by little gifts to bring fruit & vegetables purchased by themselves or their parents to school and thus, continue consuming fruit & vegetables as part of their normal diet.
- Costs: Given the short time and therefore small quantities provided, the costs per child are comparatively high but overall costs are low. This models requires a major budget allocation for accompanying measures;
- Example: Food Dudes, Ireland

Kick-start programme:

- Aims at providing children of the target group over the period of several (four to eight) weeks as part of a comprehensive program with information, education and also distribution of fruit & vegetables.
- Approach: Close cooperation with education and health sector in providing information to children and parents as well as training to teachers, link to the sector by local sourcing and site visits;
- Follow-up: Children are encouraged to bring fruit & vegetables as part of their school lunch.
- Costs: Due to the possibility to time the program in a season when (in the respective MS) local production provides for cheap and easily available fruit & vegetables (September in northern Member states, October in southern Member states), costs are medium per portion and overall;
- Example: Fruit Break, Denmark; Week of School Fruit, Germany

Provision programmes:

- Aims at providing children of the target group in all public schools over a full school year with free fruit & vegetables to be consumed during school breaks;
- Approach: Distribution of fruit & vegetables to all children free of charge, initial information provided and information packs for every school year;
- Follow-up: No accompanying measures and no inter-sector integration, but evaluation of the impact (fruit & vegetables consumption);
- Costs: Low on the amount per portion due to economics of scale but high overall costs (180 to 200 school days), multi-annual contracts allow for sector to plan ahead;

- Example: School Fruit & Vegetables Scheme, England; Proposal of INTERFEL/APRIFEL for a daily/twice weekly programme (as of September 2008), France;

ii. Option 3 supporting initiatives

This model is roughly based on Council Regulation (EC) No 3/2008 of 17 December 2008 on information provision and promotion measures for agricultural products on the internal market and third countries, the implementing rules being laid down in Commission Regulation (EC) 1071/2005.
The different activities can be defined and explained in more detailed as part of the implementation in the following:

Measures are defined in three categories and with three activities each (examples in brackets):

- Produce: Purchasing of fruit & vegetables, logistics & distribution, equipment

- Information: Promotion (produce-linked activities), awareness rising (health and education-based activities), publicity (signboards, web page)

- Accompanying measures: Link to agriculture (visits to farms), education (training of teachers), health (involvement of parents);

In principle, all measures except the purchase of produce are eligible but need to be defined by Member states in detail, taking into account the short list as proposed in option 4, however, without any limiting the Member states choice in any way.

Subsequently, Member states are to make a call for proposal to the sector every year. Funds will be allocated by EC annually (co-funding Member states and proposing organisation compulsory), funds not used (due to lack of qualified projects) to be returned to EU budget. List of selected programmes to be checked for compliance by EC and approved before funding is committed.

Implementing bodies (paying agency and managing authority): In federal countries, these could be several (e.g. one per Land in Germany), but also an NGO (6-a-Day in Denmark) or a sector organisation (INTERFEL in France).

Budget: Allocation of EU budget according to number of school children in age class (in general from 4 to 16 year olds), commitment of 50% of the respective MS budget at the beginning of financing period: If 50% of the allocated funds have been committed by mid of the financing period (e.g. mid school year), the other 50% of these funds will be released to these MS. The funds of those MS who have committed less than 50% at this moment in time will be dispersed onto the MS that have managed.

The following **reporting obligations** have been identified as minimum requirements if an SFS is to follow this model:

At the European level, the **Management Committee** 'fruit & vegetables', chaired by DG AGRI
- Approval of list of selected programmes
- Approval of implementing bodies
- Notification of call for tender

- Copy of programmes
- List of Implementing bodies and single contact point

In the Member States, the respective implementing bodies assigned are first of all the **Paying Agency** which should be the authority in charge of the financial management of agriculture and rural development and the **Management Authority**, which could be the Ministry of Agriculture, an NGO or a regional authority. This authorities would be in charge of reporting obligations comprising the provision of:

- Reasoned opinion on selected projects
- Scope (schools) and depth (children) of participation
- Amount disbursed (total, per activity, per target group)

The **project promoter** as the actual recipient of the funds

- Application form incl.:
- Timetable of activities and expenditure,
- Financial resources (bank statement),
- Implementation report,
- Expenditure incurred (quarterly reports), work carried out (summary reports), financial statement (summary report), evaluation of obtained results

At the level of the beneficiary, the **school** and the final beneficiary, the school children:

- Financial and human resources
- Declaration of participation
- Evaluation in-depth (20% of all schools)

In addition, the following **control obligations** by external audit services are to be pursued, based on a risk analyses:

- On every level of the distribution chain 10% of total value of produce
- Of all schools 5% on eligibility of children & expenditure

4.6.1. Option 4 driving initiatives

This model is roughly based on Council Regulation (EC) No 1255/1999 on community aid for supplying milk to pupils in educational establishments, the implementing rules being laid down in Commission Regulation (EC) No 2707/2000 (regime currently under review, below information is based in reviewed legal text).

Products: Purchasing of fruit & vegetables would be financed 50% (or 75% in the convergence regions) by the EU. Logistical and distribution expenditure would be paid as a lump-sum based on a fixed percentage of the value of the products purchased in order to lessen the administrative burden. Additional resources for product purchases could be provided by Member State or private funding. If State aid is used, the Commission would have to be duly notified.

The following **reporting obligations** have been identified as minimum requirements if an SFS is to follow this model:

At the European level, the **Management Committee** fruit & vegetables, chaired by DG AGRI

- Allocation of funding according to transparent criteria
- Notification of participation incl. policing arrangements
- Contact point

In the Member States, the respective implementing bodies assigned are first of all the **Paying Agency** which should be the authority in charge of the financial management of agriculture and rural development and the **Management Authority**, which could be the Ministry of Agriculture, an NGO or a regional authority. This authorities would be in charge of reporting obligations comprising the provision of:

- Scope (schools) and depth (children) of participation
- Amount disbursed (total, per activity, per target group)

At the level of the beneficiary, the **school** and the final beneficiary, the school children:

- Invoices (externally certified)
- Purchasing system (certified)
- Evaluation (20% of all schools on voluntary basis)

In addition, the following **control obligations** by external audit services are to be pursued, based on a risk analyses:

- On every level of the distribution chain 10% of total value of produce
- Of all schools 5% on eligibility of children & expenditure