



# Diet and Health in European Children

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- on behalf of the I.Family consortium -



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement No. 266044

Building on



**Descriptive results**

**Effects of diet on children's health**

**Possible determinants of good and bad diet**

## Far too much energy-dense food eaten by I.Family children

- ✓ Average dietary energy density close to **1.9 kcal/g**
- ✓ Higher in school children (1.94 kcal/g) vs. pre-schoolers (1.81 kcal/g)

About **1.25 kcal/g** considered a healthy average density



**3.4 kcal/g**



**2 kcal/g**



**1.4 kcal/g**

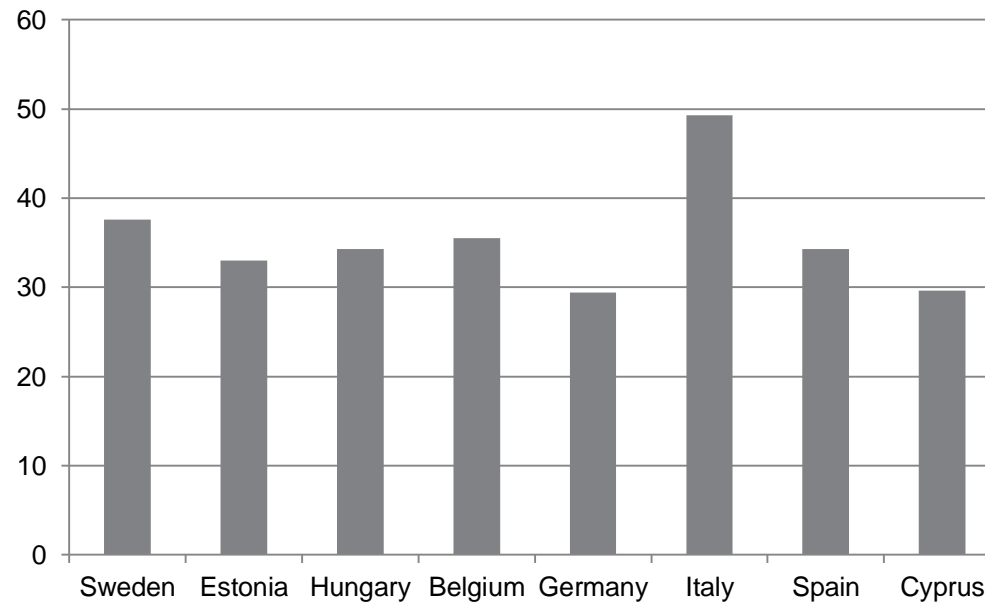
## Key finding 2 Mediterranean-like diet popular in non-Mediterranean centres

++ Vegetables, legumes  
++ Fruit and nuts  
++ Cereals  
++ Fish



- Meat  
- Processed meat  
- Dairy products

Percentage of children with high adherence to a Mediterranean-like diet



## Key finding 3 Healthy diet associated with reduced risk of overweight and obesity

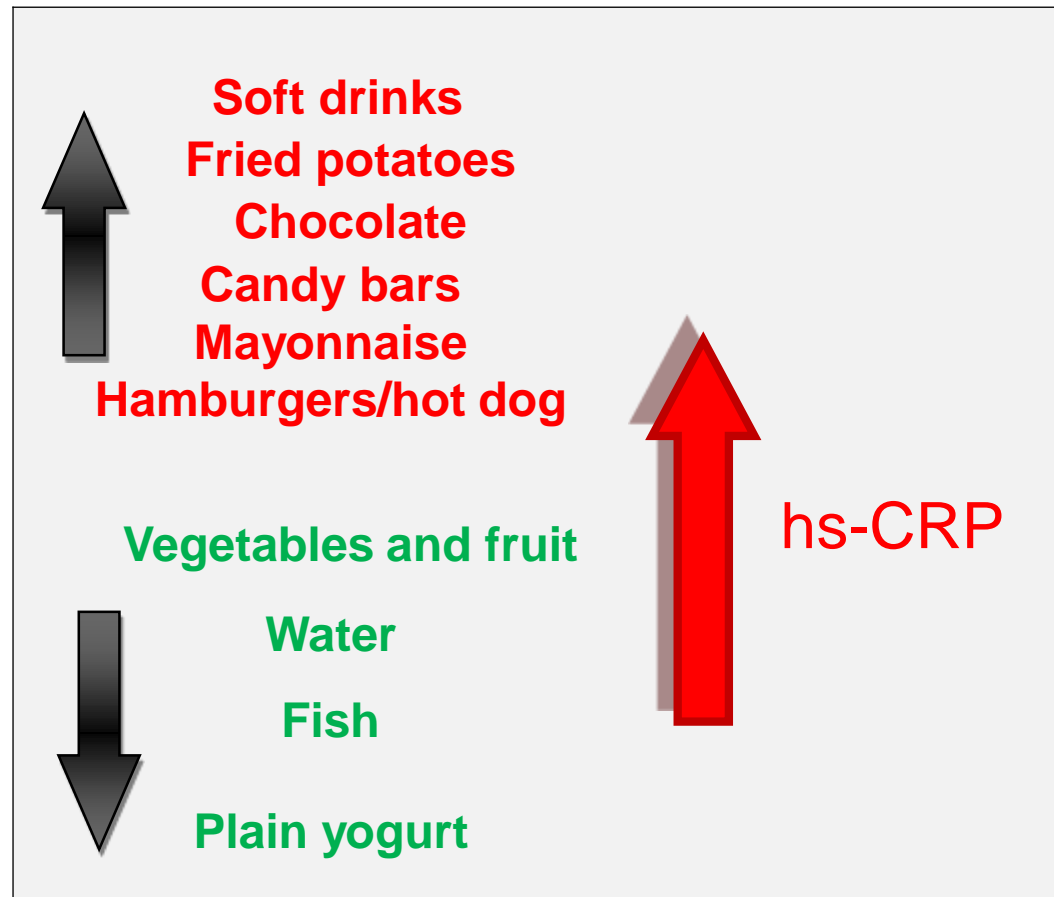
<i>Adherence to a diet rich in:</i>	++	vegetables and legumes
	++	wholemeal cereals
	++	fresh fruit
	++	plain milk
	++	foods without added sugar
<i>Compared with no adherence</i>	<b>medium adherence</b>	- 20 % less probability of becoming overweight/obese
	<b>high adherence</b>	- 36 % less probability of becoming overweight/obese

## Consumption of heavily processed foods associated with blood levels of an inflammatory marker

High-sensitivity C-reactive protein (hs-CRP)

*inflammatory biomarker associated with adiposity and cardiovascular risk factors*

High hs-CRP levels  
persist over time !



**Key finding 5** Exclusive early breastfeeding is  
associated with reduced childhood overweight/obesity

Exclusive breast-feeding

never

-

1-3 months

- **13%** decreased probability of becoming overweight/obese

4-5 months

- **19%** decreased probability of becoming overweight/obese

6 months

- **29%** decreased probability of becoming overweight/obese

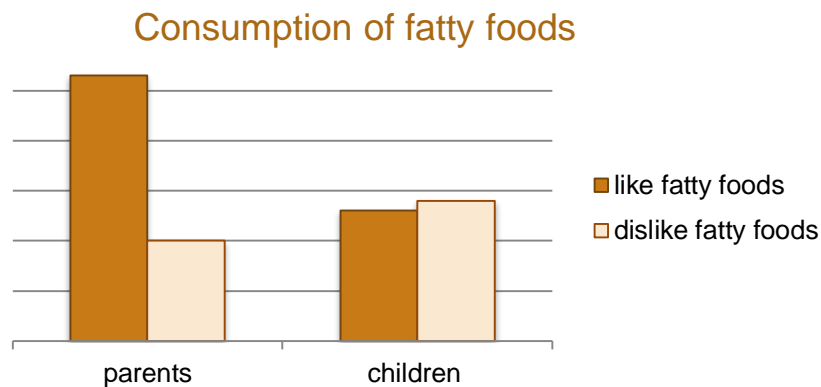
## Key finding 6 Unhealthy diets are more common in children from poorer families

Dietary patterns more common (↑) or less common (↓) in different groups of children

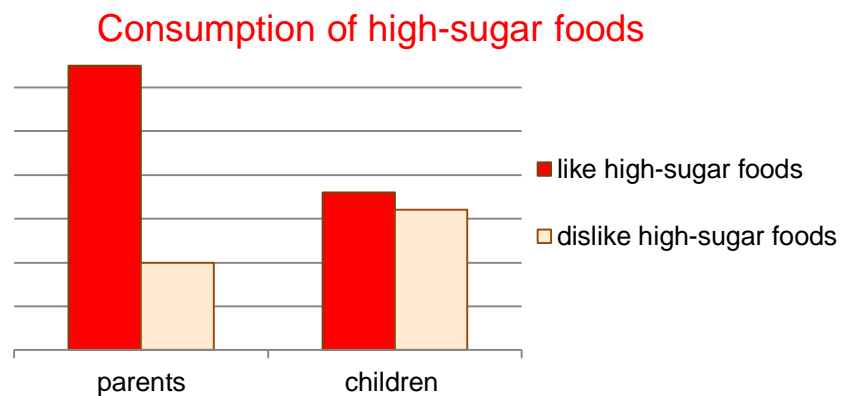
COMMON DIETARY PATTERNS			
<i>Family type</i>	<b>Street food, fast food</b>  french fries, hamburger, pizza, kebab, savoury pastries	<b>Sweet foods</b>  sweetened drinks, chocolate, biscuits and candies	<b>Healthy foods</b>  raw vegs, fruits, wholemeal products
<i>Migrants</i>	↑ +25%		
<i>High maternal and paternal education</i>		↓ - 30%	↑ +50%
<i>High household income</i>		↓ - 30%	↑ +30%



Parents who like fatty food consumed twice as much fatty food as those who do not like fatty food



Parents who like sweet food consumed three times as much sugar-rich food as those who do not like sugar-rich food

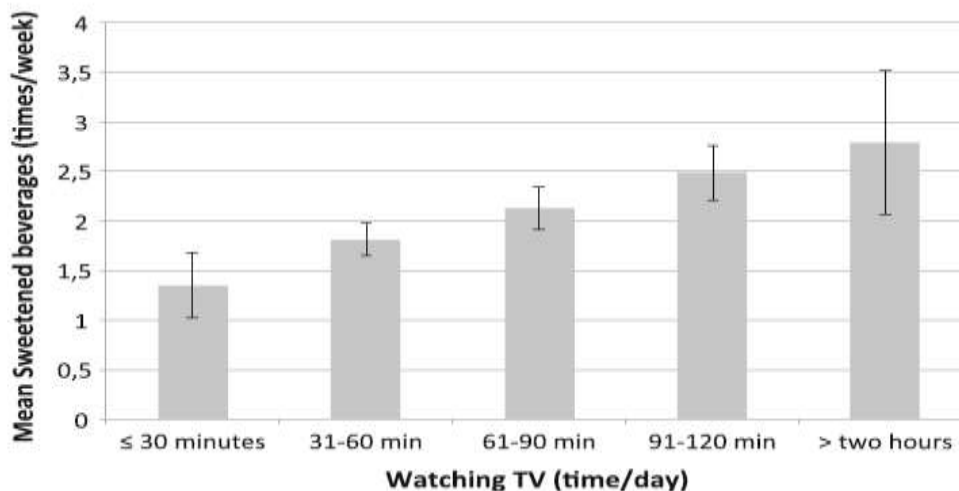


**...but children's food consumption seems unaffected by their own preferences**

- ✓ Children copy their parents
  - If the mother or father eats a sugar-rich diet, the child is **twice** as likely to do the same
  - This effect gets stronger as the number of shared meals increases
  
- ✓ If a food is on the table the child will consume it
  - If the mother or father eats a sugar-rich diet **and** sugary drinks are easily available, the child is **three times** more likely to eat a sugar-rich diet



## Key findings 9 Effect of media on food choices regardless of family rules



Children exposed to commercial TV advertising consume sweetened drinks much more frequently. The frequency increases as TV time increases

Children exposed to TV advertising have about **twice** the probability of becoming a “**sweetened drink consumer**”

This happens regardless of whether parents discourage such drinks.

**Media influence stronger than parental rules !**

## Key finding 10 Effect of media on food choices regardless of taste preferences



*A subsample of 1,696 schoolchildren underwent sensory testing for sweet taste preferences*

Children who watch TV more than 1 hour per day and have **sweet taste preference**

**+ 20 %** probability to eat high sugar diet compared to those who watch less TV

Children who watch TV more than 1 hour per day and have **no preference** for sweet

**+ 20 %** probability to eat high sugar diet compared to those who watch less TV

**Media influence stronger than  
taste preference !**

- ✓ European children eat far too much energy-dense food
- ✓ Unhealthy dietary patterns pose risks to children's health status
- ✓ Early exclusive breastfeeding decreases overweight/obesity risk
- ✓ Parents influence their children's food consumption as gatekeepers and as role models
- ✓ Advertising has a major effect on the quality of children's diet
- ✓ The media exert a greater influence than parental rules on children's diet
- ✓ The media exert a greater influence than personal preferences on children's diet



Thank you!