



# How Family Relations Influence Children's Health

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- on behalf of the I.Family consortium -



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Building on





## Many things “run” in families

"Like mother, like daughter. Like father, like son"





## Siblings



- share home environment
- share genes
- close in age

## Parents & offspring



- share home environment
- share genes

## Husbands & wives

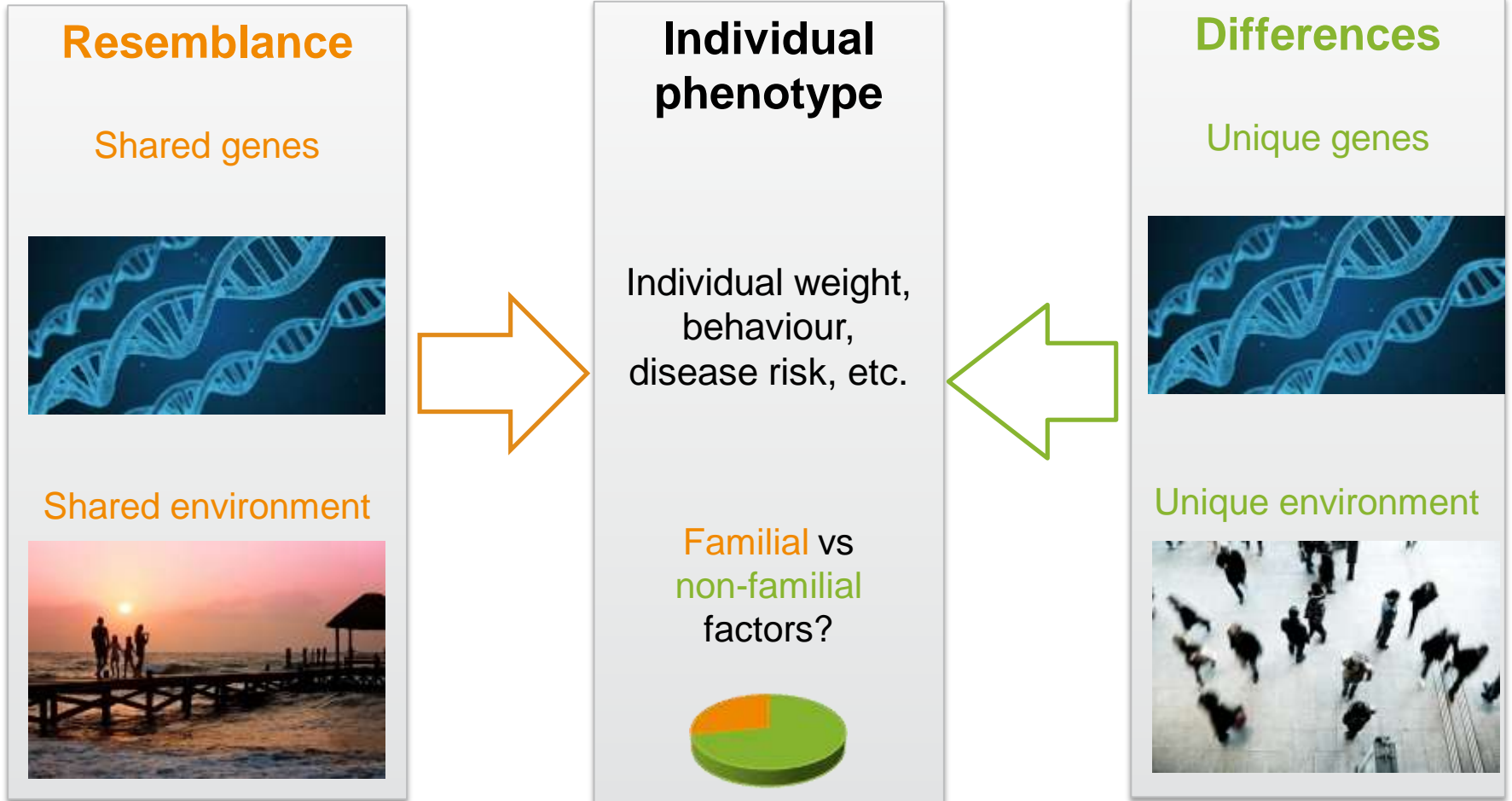


- share home environment
- assortative mating
- close in age

- We studied parent-child pairs, brother/sister pairs and parental pairs and examined their resemblance
- We also quantified familial and non-familial influences on obesity-related traits



# Sources of familial resemblance and differences





# Online tool SACANA

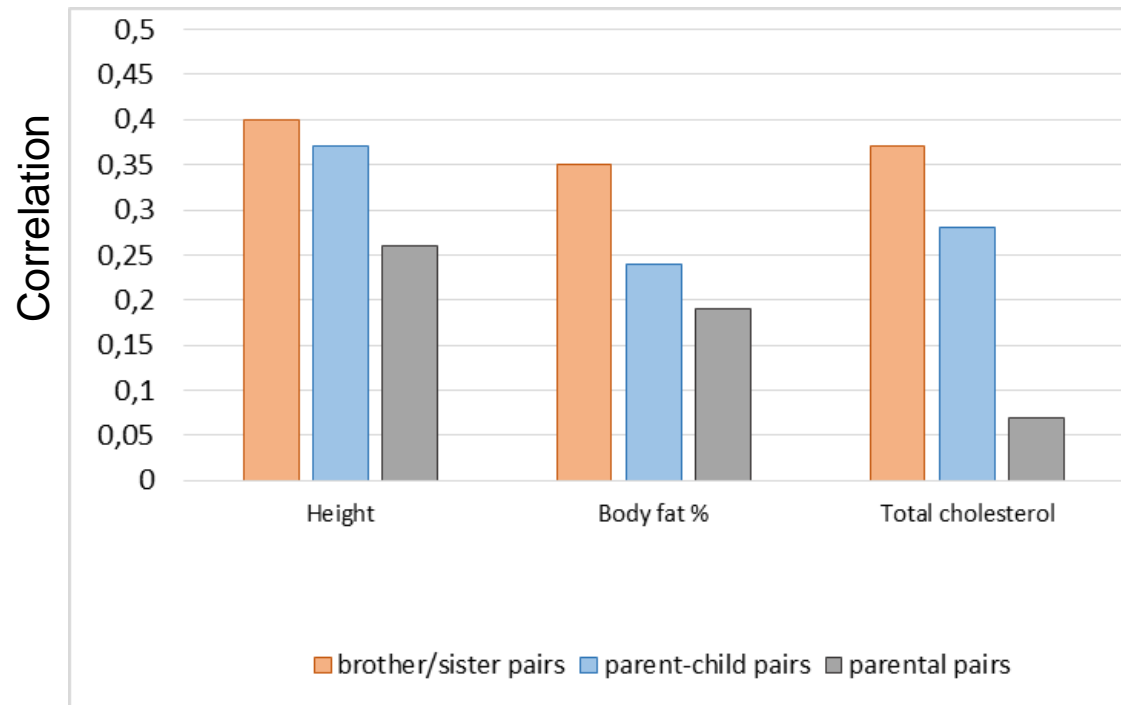


Healthy foods	Unhealthy foods
<b>Cereals</b> Low in sugar Low in fat High in fibre	<b>Cereals</b> High in sugar High in fat Low in fibre
<b>Fats/oils from plant origin</b>	<b>Fats/oils from animal &amp; processed origin</b>
<b>Low fat &amp; unsweetened milk &amp; milk products</b>	<b>Full fat &amp; unsweetened milk &amp; milk products</b>
<b>Fresh fruit &amp; vegetables</b>	<b>Fried foods, fast food, snack foods</b>



## KEY MESSAGES

- Family members resemble one another in terms of height, body fat measures and cardiovascular risk (e.g. total cholesterol)
- The resemblance is strongest for sibling pairs, intermediate for parent-child pairs and weakest for parental pairs

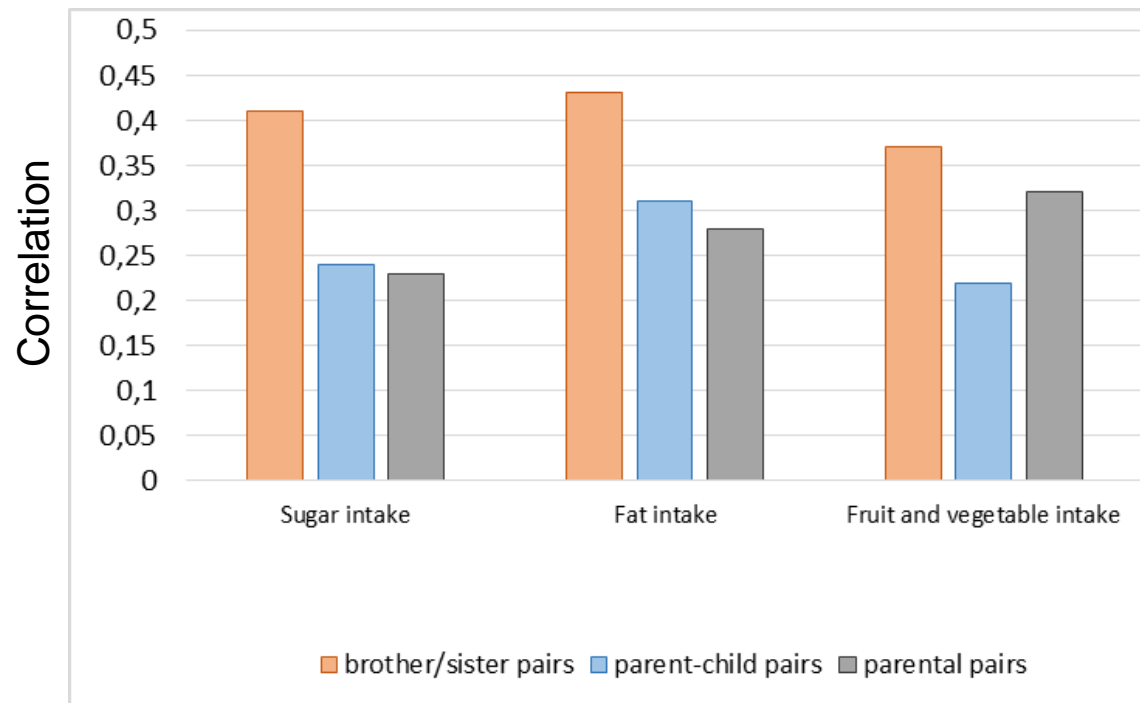






## KEY MESSAGES

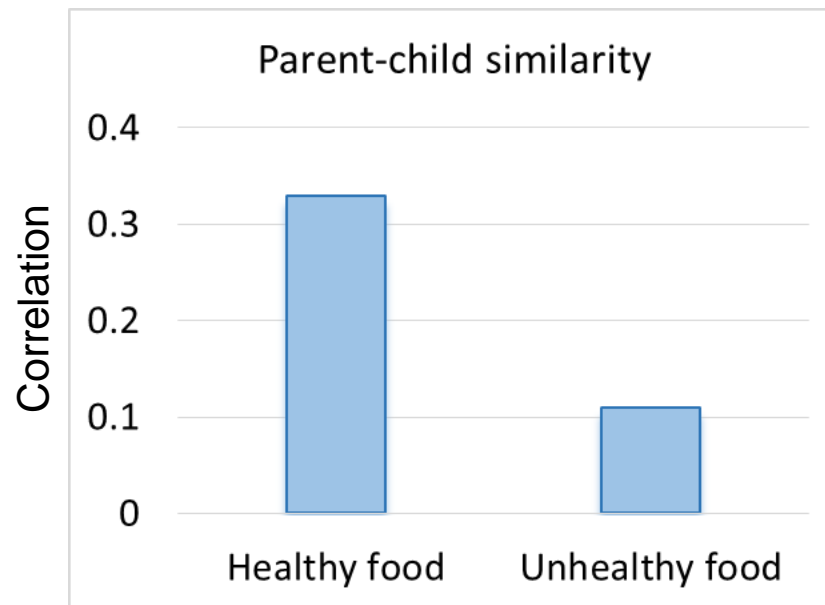
- Family members also resemble one another in dietary intake
- The resemblance is strongest for sibling pairs and about the same magnitude for parent-child and parental pairs





## KEY MESSAGES

- Parent-child resemblance is stronger for healthy than unhealthy food intake

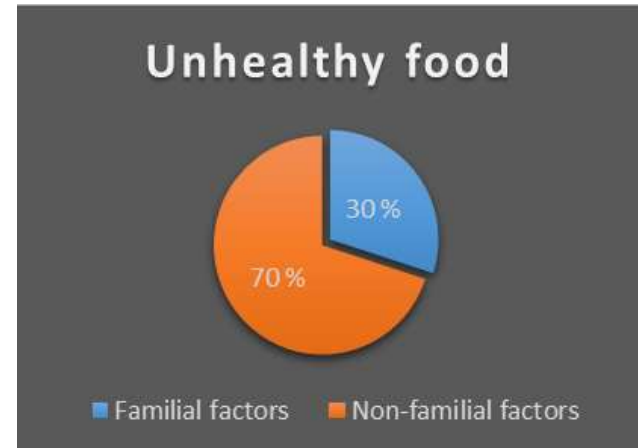
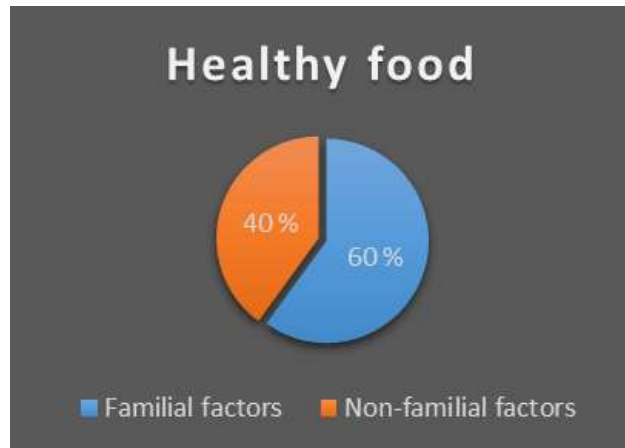






## KEY MESSAGES

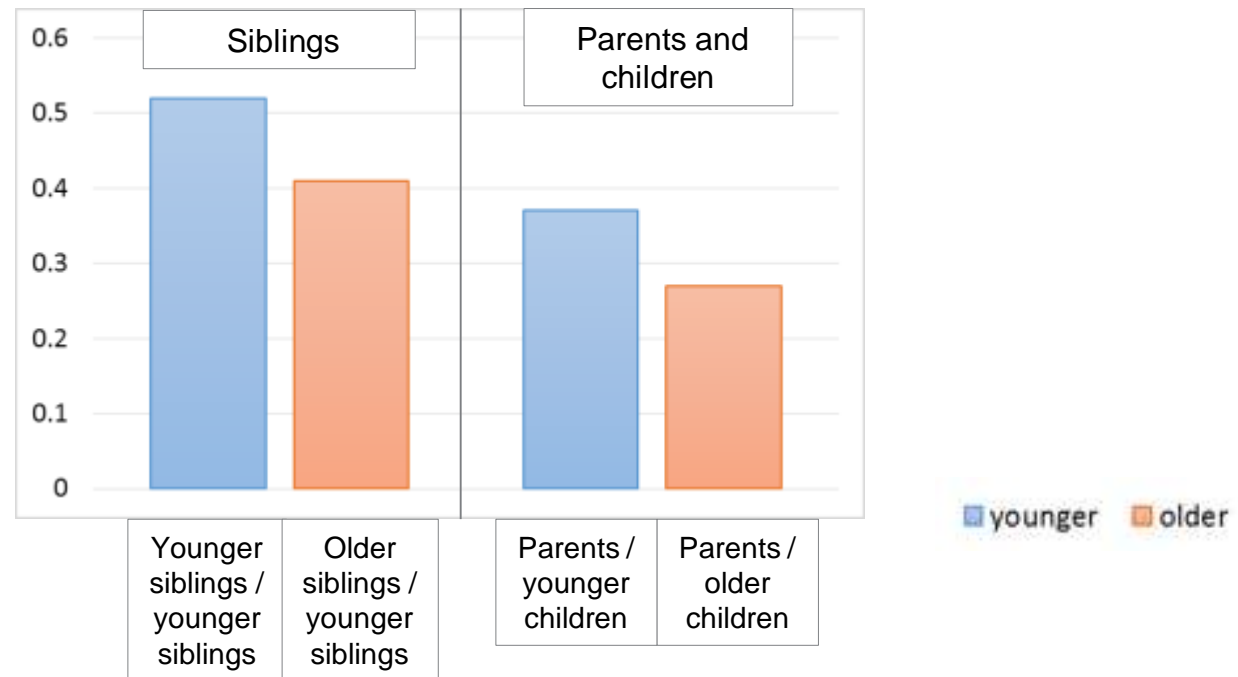
- Familial factors explain 60% of variability intake of healthy foods
- They explain only half as much intake of unhealthy foods (30%)





## KEY MESSAGES

- Sibling similarity in healthy food intake is stronger than parent-child similarity
- The similarity is stronger between younger than older siblings and between parents and their younger than older children





## Future work

- Which environmental factors distinguish siblings where one child is overweight or obese, and the sibling not?



## Takeaway messages 1

- Family members resemble one another in terms of nutrition and obesity-related traits – there are many different reasons for this
- Interventions aimed at reducing obesity and improving diet quality may be more effective when targeting both parents and the entire family rather than individuals



## Takeaway messages 2

- Family-based interventions could be most successful when promoting healthier diets and targeting families with younger children
- Different patterns in healthy and unhealthy food consumption highlight the major influence of contemporary food environments in promoting less healthy options to children



**Thank you very much for your  
attention!**