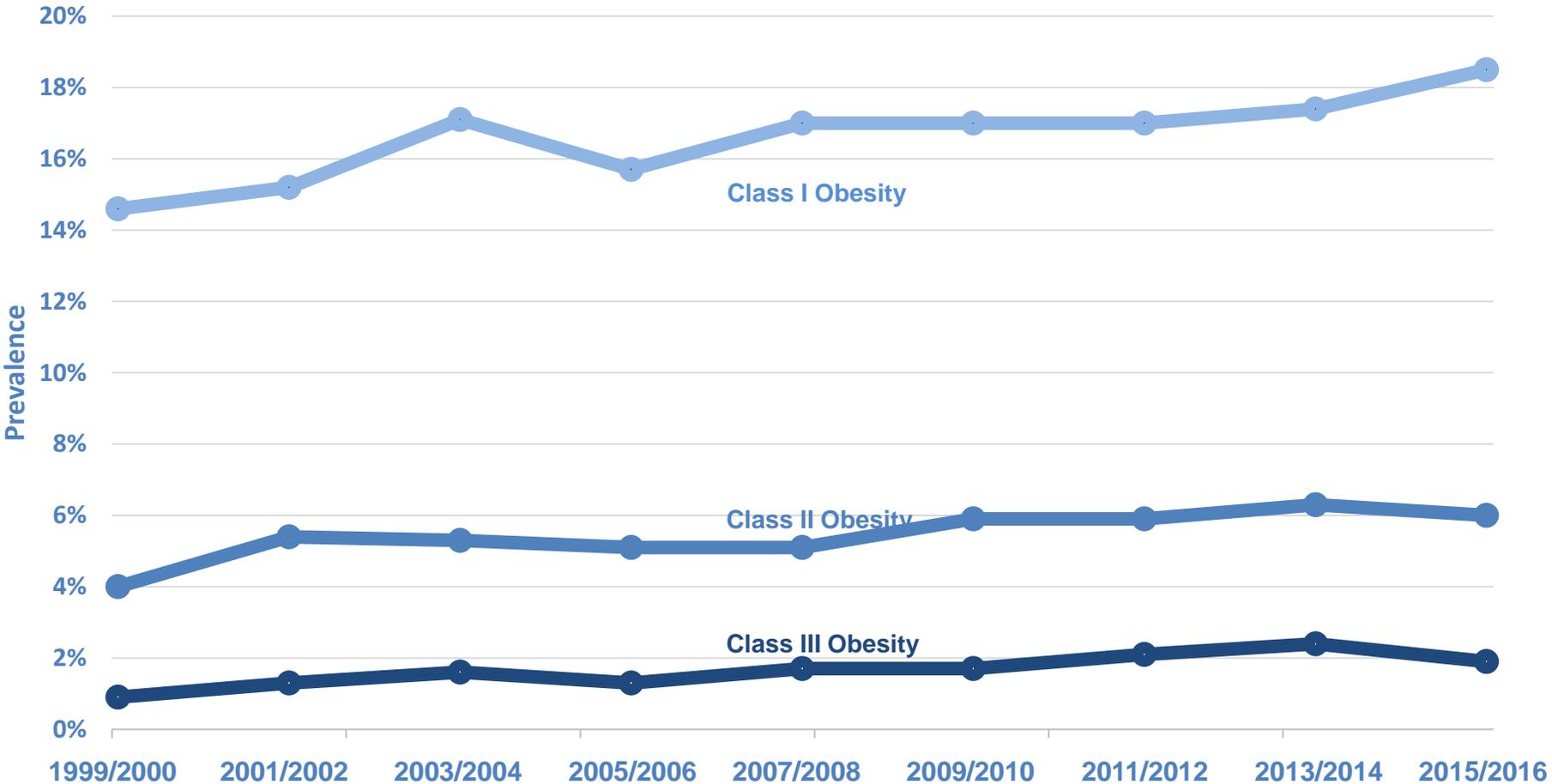


# Public Presumptions That Severe Childhood Obesity Is Simply Caused by Bad Habits

Theodore K. Kyle, Joseph Nadglowski, Nathalie Dumas, Daniele Di Pauli

November 5, 2019

# Prevalence of Childhood Obesity Is Growing Steadily



# Growth in Severe Childhood Obesity Is Most Significant

“Building on our previous work, we have been able to document the steadily rising levels of severe obesity, modeled on adult criteria of class I, II, and III obesity, with the rise of children with severe obesity having been the most significant.”

*- Skinner et al, Pediatrics, 2018*



Eugene, photograph © Garen Dibartolomeo

# But Bias Drives Policy Decisions That Affect Clinical Care



Nathalie, photograph © Garen Dibartolomeo

*“Prevention obviously has to be the primary strategy for dealing with obesity, because there’s just too much obesity to treat.”*

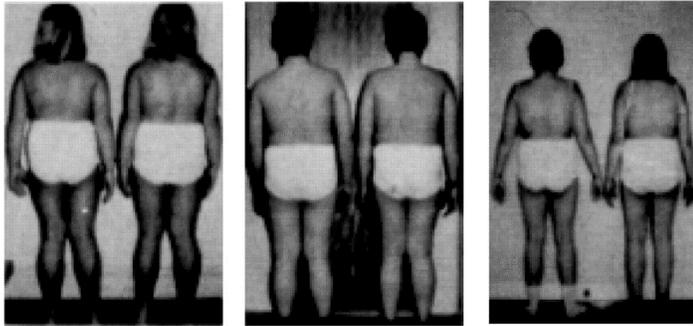
# Only 37 Clinics for 5 Million Children with Severe Obesity



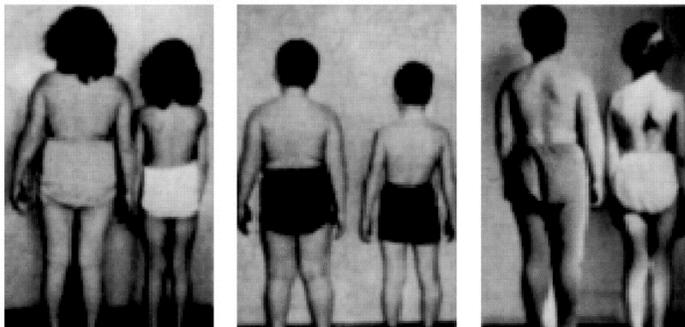
Source:  
<http://conscienhealth.org/2017/02/childhood-obesity-treatment-programs-serve-many/>

# Obesity Is Well-Established as a Highly Heritable Chronic Disease

## Body Mass in Twins



**Monozygotic Twins (Intrapair Correlation = 0.66)**



**Dizygotic Twins (Intrapair Correlation = 0.26)**

Source: Borjeson M, The aetiology of obesity in children, 1976



**Obesity—still highly heritable  
after all these years**

Solomon K Musani, Stephen Erickson, David B Allison ✉

*AJCN*, February 2008

# Study Objectives

- Document public perceptions
- Regarding causes of severe childhood obesity
- In four different countries
  - United States
  - United Kingdom
  - France
  - Italy

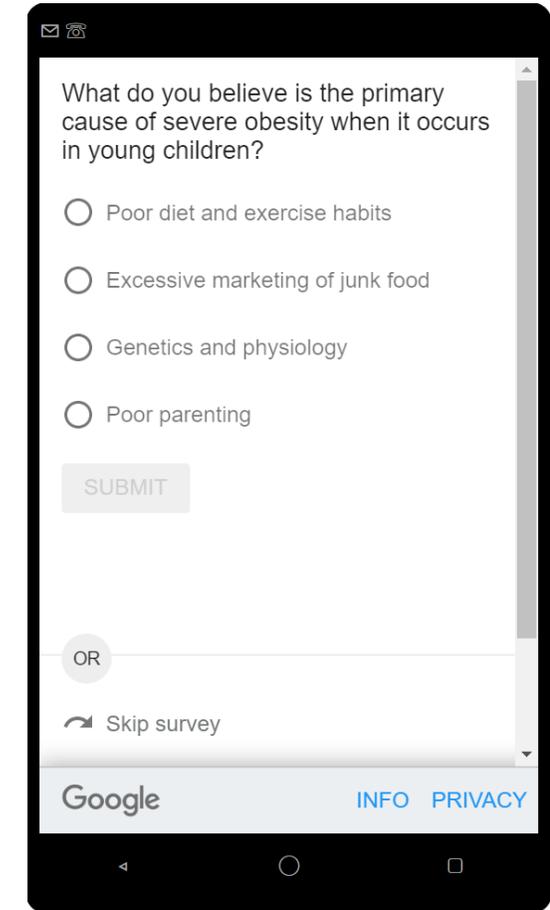
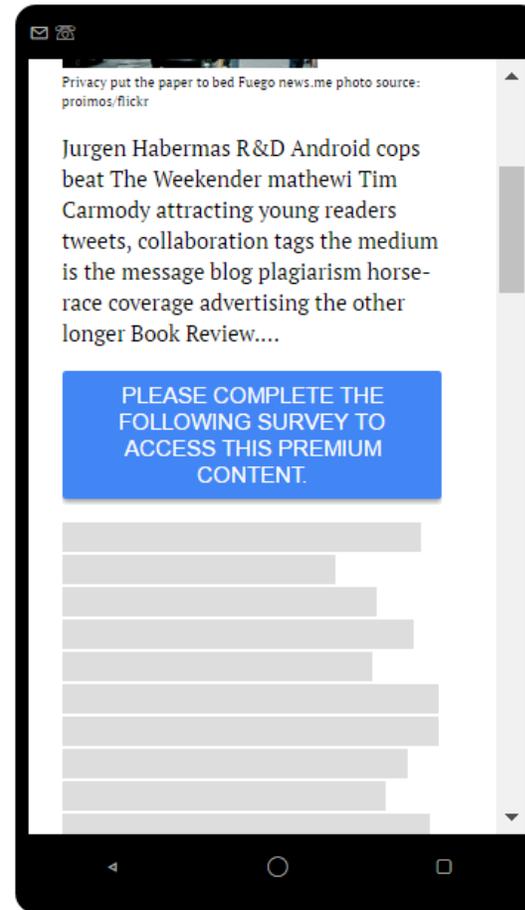


Children Learn, painting by Antonín Dvořák / Wikimedia Commons

# Web and Smartphone Samples Obtained via Google Consumer Surveys

## Primary Sample Size

- **4,018 adults**
  - 1,001 U.S.
  - 1,001 U.K
  - 1,001 France
  - 1,015 Italy
- **Fielded in April 2019**



# The Primary Question

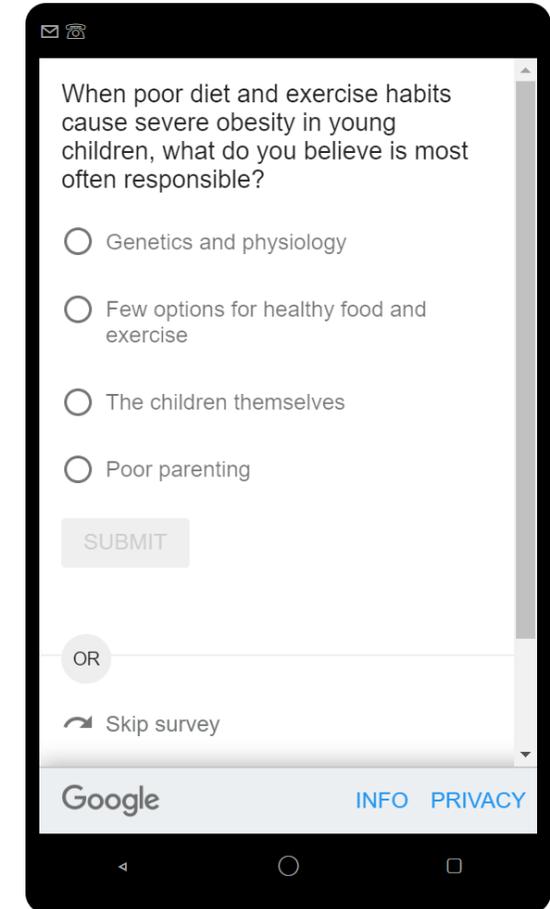
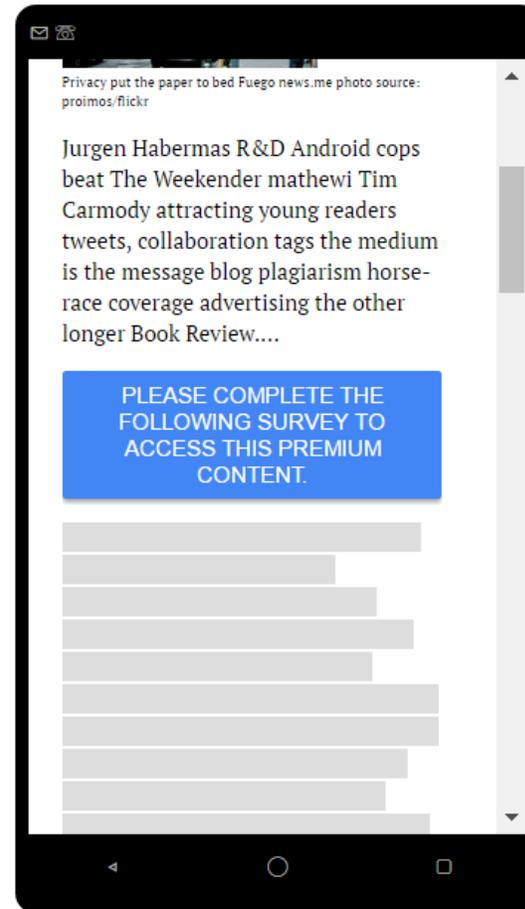
What do you believe is the primary cause of severe obesity when it occurs in young children?

- Poor diet and exercise habits
- Genetics and physiology
- Poor parenting
- Excessive marketing of junk food

# Follow-up Questions in a U.S. Sample Regarding Blame

## Secondary Sample Size

- 1,003 adults
- Split between two questions
- Fielded in May 2019
- Each respondent only answers one question



# Secondary Blame Question

When poor diet and exercise habits cause severe obesity in young children, what do you believe is most often responsible?

- Poor parenting
- Genetics and physiology
- The children themselves
- Few options for healthy food and exercise

# Secondary Question on Blaming Parents

How strongly do you personally agree or disagree?

Parents are at fault when severe obesity occurs in young children.

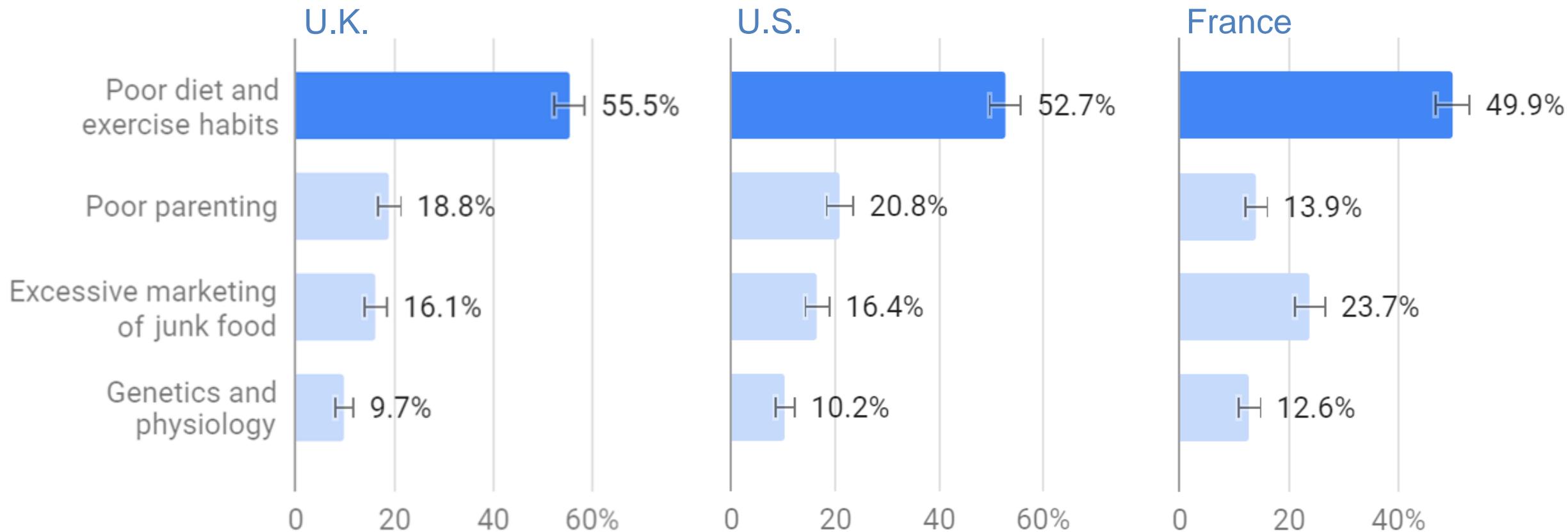


Strongly disagree

Strongly agree

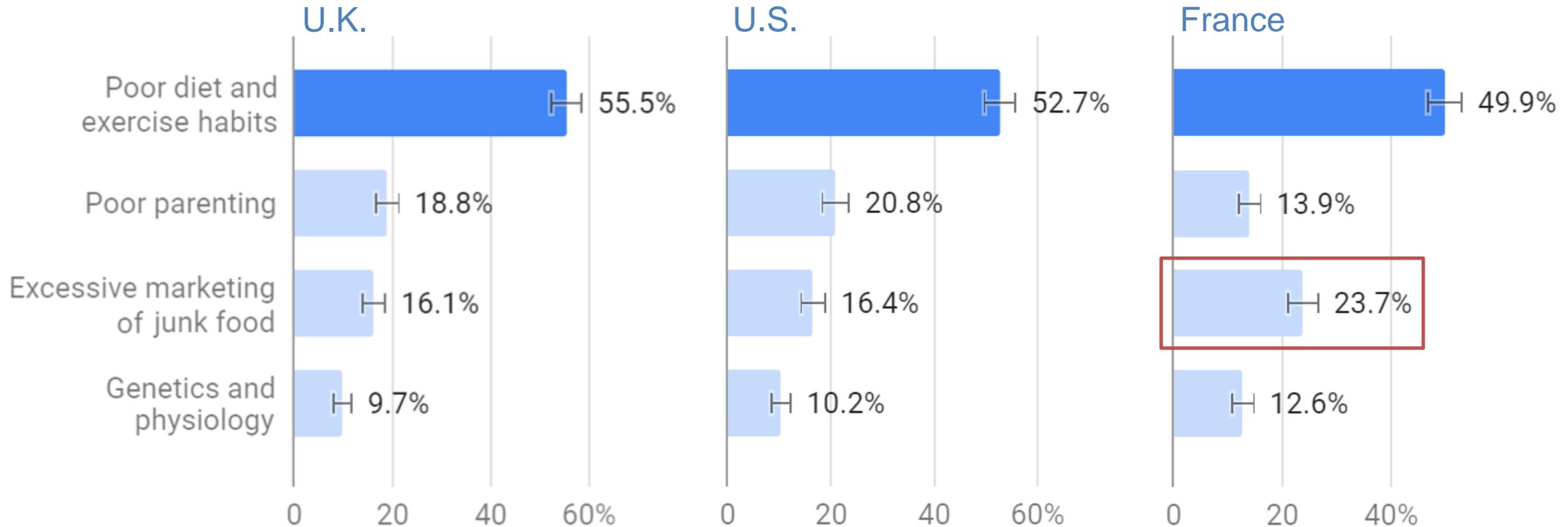
# In the U.K., U.S., and France Most Respondents Blamed Bad Habits

What do you believe is the primary cause of severe obesity when it occurs in young children?



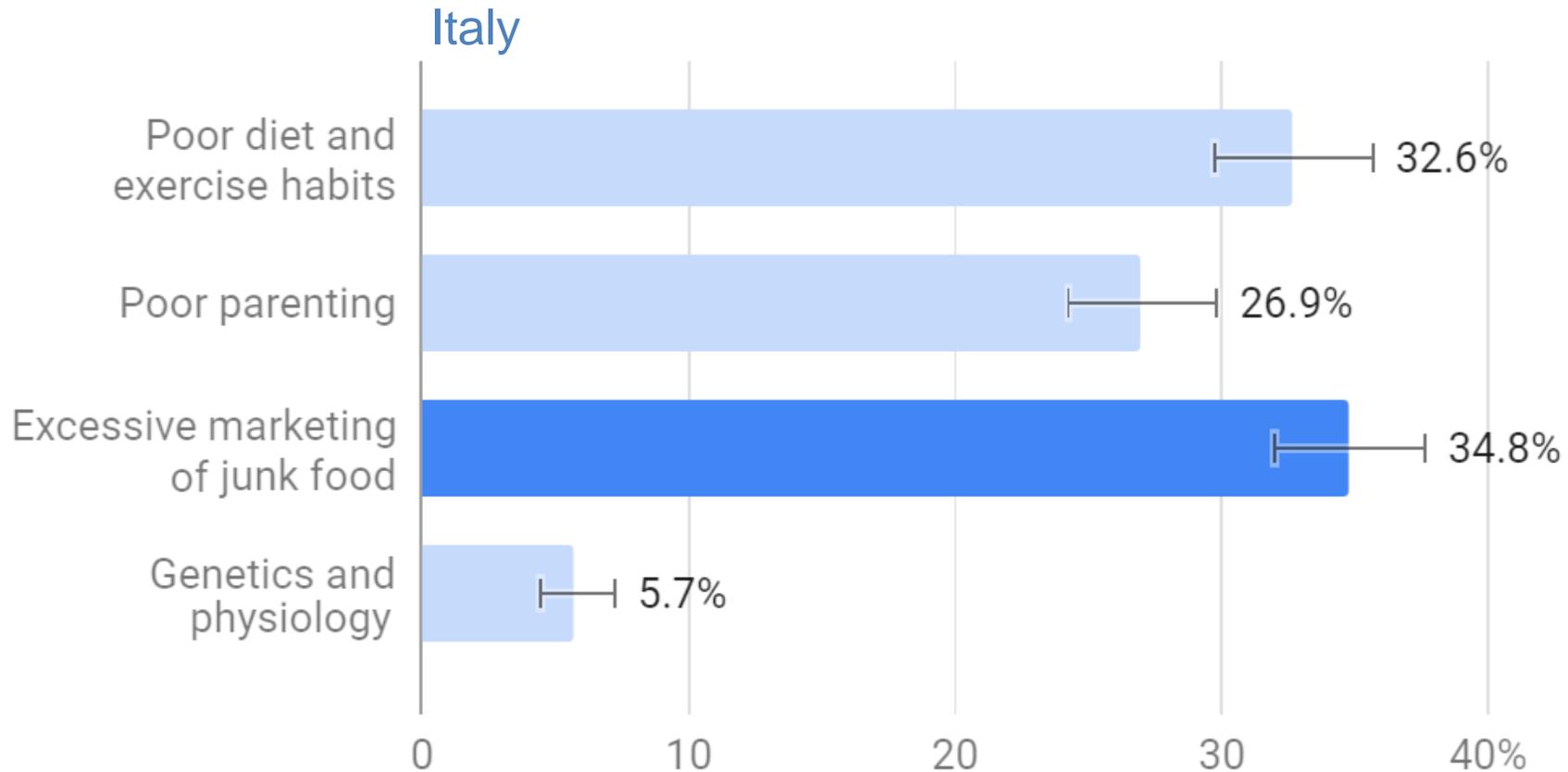
# In the U.K., U.S., and France Most Respondents Blamed Bad Habits

What do you believe is the primary cause of severe obesity when it occurs in young children?



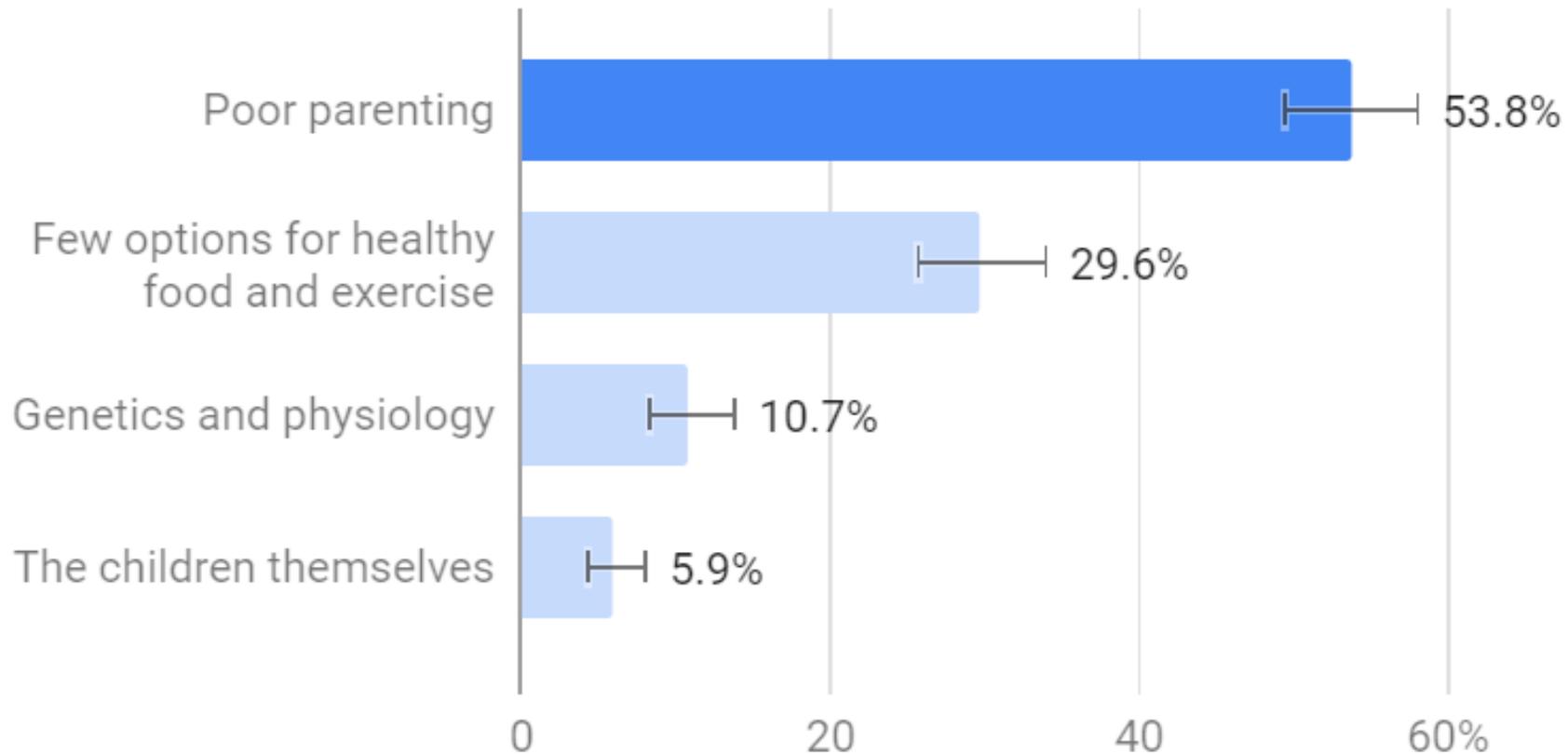
# In Italy, More Respondents Blamed Junk Food Marketing

What do you believe is the primary cause of severe obesity when it occurs in young children?



# Most American Respondents Believe Parents Are Responsible for Severe Obesity in Children

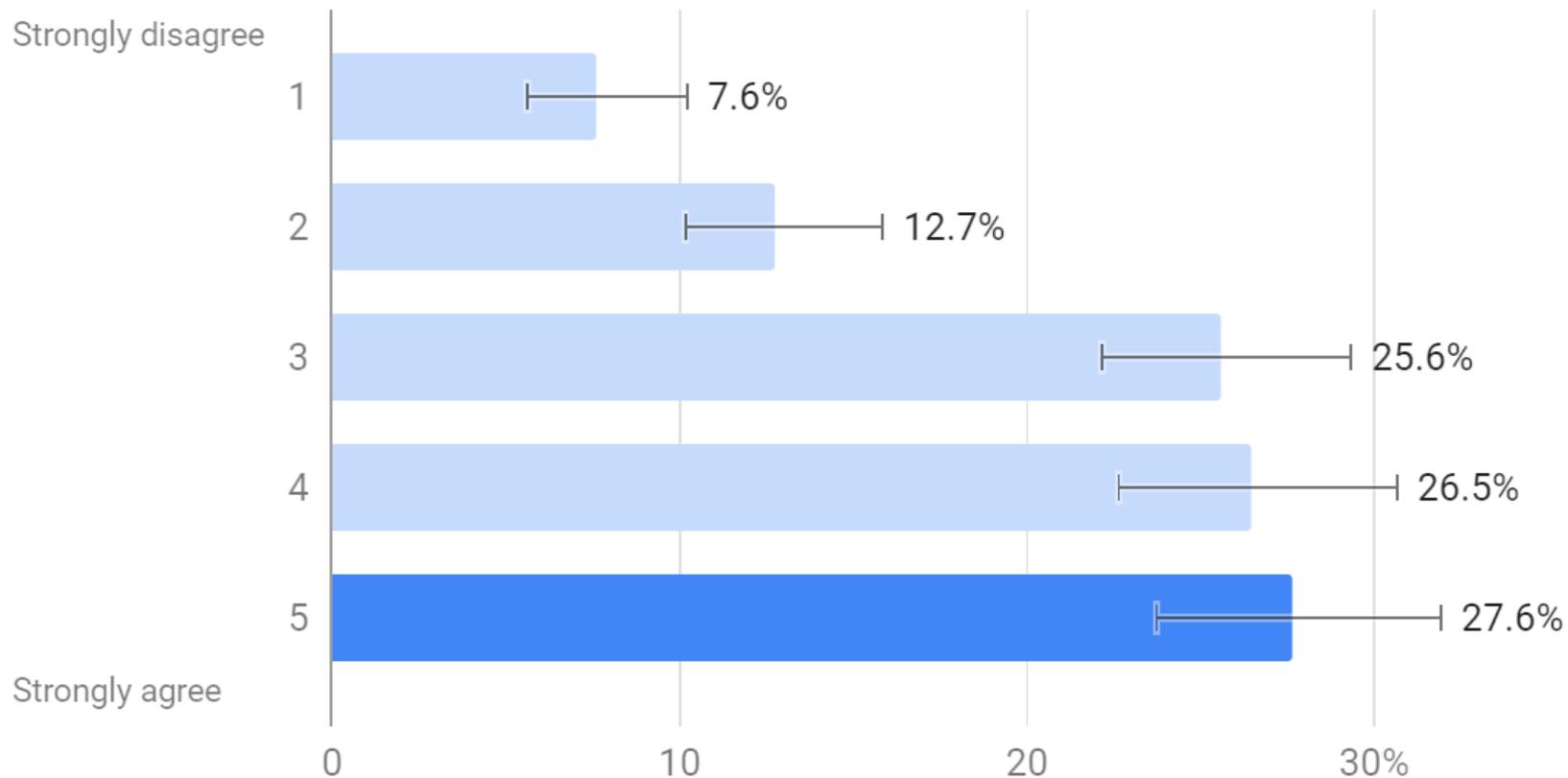
When poor diet and exercise habits cause severe obesity in young children, what do you believe is most often responsible?



# Most American Respondents Agree with Blaming Parents for Severe Obesity

How strongly do you personally agree or disagree?

*Parents are at fault when severe obesity occurs in young children.*



# Conclusions

- The public blames bad habits for childhood obesity, especially in the U.S. and the U.K.
- In Italy and France, excessive marketing of junk food is seen as a bigger factor
- The public sees genetics and physiology as relatively unimportant in all four countries
- American respondents readily blame parents



Eugene, photograph © Garen Dibartolomeo

# More Information

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<https://conscienhealth.org/wp-content/uploads/2019/11/Presumptions.pdf>

## Public Presumptions That Severe Childhood Obesity Is Simply Caused by Bad Habits

Theodore K. Kyle,<sup>a</sup> Joseph Nadglowski,<sup>b</sup> Nathalie Dumas,<sup>c</sup> Daniele Di Pauli<sup>d</sup>

### Background

A growing body of research demonstrates that obesity is highly heritable and severe childhood obesity is largely the result of genetic risk factors interacting with environmental factors that promote obesity. However, public opinion generally holds that obesity results primarily from poor choices and a failure of personal or parental discipline. The present research had a goal of documenting public perceptions about the causes of severe obesity in young children.

### Methods

In April 2019, we surveyed a total of 4,018 adults in the U.S., U.K., France, and Italy. Google Consumer Surveys collected representative online samples in these four countries. Each respondent completed only one of two survey questions asking what they believe is the primary cause of severe obesity when it occurs in young children. Respondents could choose between poor diet and exercise habits, poor parenting, excessive marketing of junk food, and genetics and physiology.

### Results

In the U.K., U.S., and France, the largest number of respondents identified poor habits as the primary cause of severe obesity in young children. The highest percentage of respondents in the U.K. (56%) made this choice. In Italy, that number was 33%. The most common response in Italy was excessive marketing of junk food (35%). The least common response was genetics and physiology (6-13% of respondents).

### Conclusions

Public opinion lends substantial support to the discredited idea that severe childhood obesity is primarily a simple matter of bad dietary and physical activity habits. Conversely, the public seems mostly unaware that genetics and physiology are important factors.

### References

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4. Sostek, K, and Brett S. How Google Surveys Works. Google LLC, 1970. <https://ai.google/research/pubs/pub46243>.

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*Presented at ObesityWeek 2019, November 5, 2019, T-O-2008*