

Preconception and Pregnancy in IBD Clinic Information Sheet

I have IBD, will my child have IBD? Genetics and IBD

Your child may or may not develop IBD . . .

Having a family history of IBD and having certain genes can predispose a person to developing IBD. The risk is less than 10% if one parent has IBD, and about 20-30% if both parents have IBD¹.

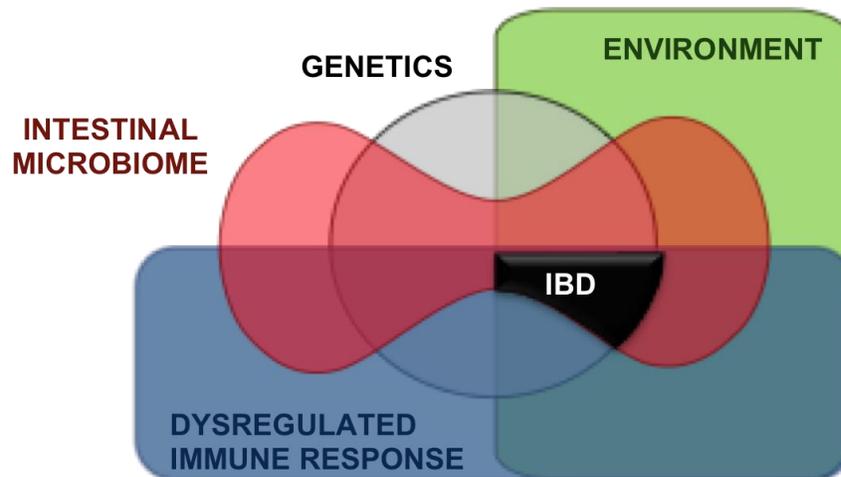
10% when one parent
has IBD



20 to 30% when both
parents have IBD



There are factors other than genetics that can affect the risk of developing IBD . . .



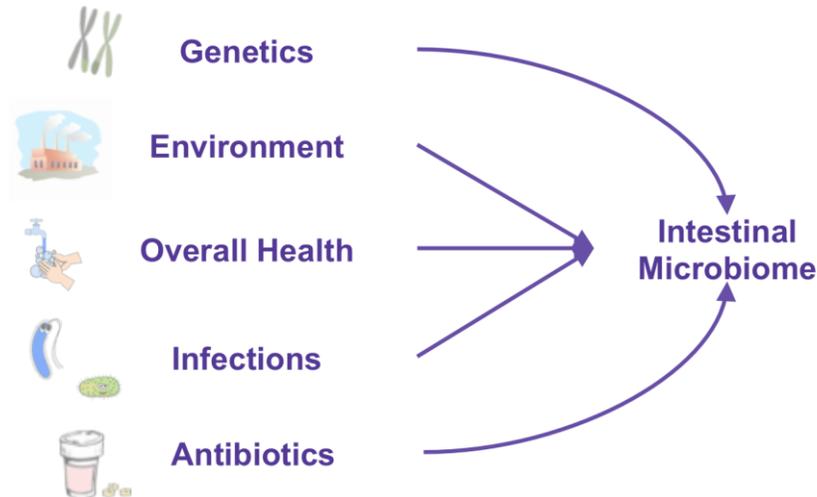
The environment is important . . .

The environment can provide triggers that lead to the development of IBD. There is a relatively high prevalence of IBD in Western and developed countries^{2,3}. However, the incidence of IBD is rising in developing countries. Children who immigrate take on the risk associated with the country to which they are moving⁴. Living in an urban setting is associated with an increased risk of developing IBD – this association appears to be stronger for developing Crohn's disease than ulcerative colitis⁴.

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Many things affect the intestinal microbiome . . .

The intestinal microbiome can be affected by a person's genes, their environment (including diet), overall health, infections, and medications (such as antibiotics).



An unbalanced intestinal microbiome can lead to a dysregulated immune response . . .

Multiple factors interact and can lead to a change in the intestinal microbiome. An unbalanced intestinal microbiome can lead to a dysregulated immune response resulting in inflammation characteristic of inflammatory bowel disease.

- the “hygiene hypothesis” proposes that
 - clean environments limit microbial exposure, leading to an altered immune system that is unable to differentiate between beneficial from harmful bacteria^{2,3}
 - the altered immune system can predispose one to exaggerated immune responses, resulting in the chronic inflammation seen in IBD



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If you are concerned about the risks of your future child developing IBD, make an appointment to see your physician . . .

- **discuss your concerns with your physician**
- **change modifiable risk factors**
 - stop smoking
 - ensure to follow a healthy diet

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References

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