Babies born in summer are more likely to be gluten intolerant, and THIS is why

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WHILE it is very nice celebrating a birthday in the sun, experts have revealed babies born during spring and summer months are at greater risk of becoming gluten intolerant.

A lack of sunshine in late pregnancy has also been linked with triggering [coeliac disease](http://www.express.co.uk/life-style/health/669202/gluten-free-and-coeliac-disease-awareness) - a disorder where the body cannot tolerate gluten found in bread and pasta.  
  
Up to half a million people in the UK could be suffering from the condition.  
  
Now a study of almost two million children in Sweden has backed a link with the season of birth and becoming allergic to the wheat protein - which infants usually begin eating at about six months of age.  
  
Researchers say those born in the warmer months would initially be exposed to gluten in the winter - when infections like cold and flu are common.

redinah Namatovu, of Umea University in Sweden, said: "One hypothesis for increased coeliac disease risk and spring/summer birth is those infants are more likely to be weaned and introduced to gluten during autumn/winter - a time characterised by exposure to seasonal viral infections."  
  
Viral infections alter intestinal bacteria and increase the permeability of cells lining the gut, which could prompt the development of coeliac disease, she said.  
  
[Low levels of vitamin D](http://www.express.co.uk/life-style/health/691823/ITV-This-Morning-second-opinion-vitamin-D-Dr-Ranj-and-Dr-Sara?????????) in late pregnancy have also been linked to coeliac disease - as well as immune related diseases such as multiple sclerosis, inflammatory bowel disease and type 1 diabetes.

Every child in Sweden - a country which gets less sunlight than most countries - is given state funded vitamin D supplements from one week of age up to the age of two years.

Ms Namatovu said lack of the nutrient has also been linked to coeliac disease.  
  
She said: "Pregnant women who give birth in spring have the lowest levels of vitamin D during late gestation when important programming and development of the foetal immune system takes place."  
  
The research, which was published in Archives of Disease in Childhood, follows at least three previous studies that have backed the sunshine hypothesis.  
  
One in the US looked at nearly 2,000 people with coeliac disease and found more were born in the spring than in any other season.  
  
Ms Namatovu’s research showed the risk of diagnosis was around ten percent greater among children born in spring - March to May - and summer - June to August and autumn - September to November than it was among those born in winter.

"This would contradict the sunshine hypothesis and suggest other things could be behind the season of birth phenonmenon - such as babies being exposed to bugs when they are being fed foods containing gluten for the first time,” she said.   
  
She added more research is needed into why some babies are more vulnerable to gluten intolerance.   
  
More than 500,000 people in the UK suffer from coeliac disease - most of whom are unaware they have it.  
  
Coeliac disease is a lifelong condition where the immune system attacks its own tissue in response to gluten which is present in nearly all bread, cakes and pasta.  
  
The condition is normally associated with diarrhoea, bloating and abdominal pain - as well as fatigue and anaemia because nutrients from food aren't absorbed sufficiently as a result.