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British Princess Kathrine Middleton did well to deliver the future king, Prince George Louis in July in the normal way instead of opting for the easier caesarean way to save time and effort. For, a latest scientific study shows that children born through c-section are more vulnerable to a wide range of illnesses due to the absence of a beneficial group of bacteria in their guts.

A study of 24 infants revealed that the ones born through the vaginal canal route had the abundance of Bacteroidetes phylum, a beneficial group of bacteria that triggers immune responses and a set of chemicals that fight allergies in newly borns. Babies born through c-section lack these in the first two years and they will be prone to diseases due to lack of developed immunity, according to a study reported by the British Medical Journal quoting a study in another scientific magazine, Gut.

This means that pharmaceutical companies should aim to develop products that enhance immunity in millions of children born through c-section in the first two years of their life and increase their chances of survival.

Scientist said they studies mothers who delivered babies through both the methods. During c-section mothers are given strong doses of antibiotics to suppress various infection. But this was not the reason for the absence of beneficial bacteria colonies in c-section babies . Because same levels of beneficial bacteria were reported in both sets of mother prior to delivery.

So it is surmised that babies acquire the beneficial bacteria colonies while passing through the vaginal canal during normal delivery and this does not happen during c-section. Same is the case with two sets of beneficial chemicals, Th1 and Th2 in the blood which are known to trigger immune responses in human body and organizes protection against many allergies early in human life.

Babies delivered through c-section start acquiring collections of beneficial bacteria in their guts after 12 months and get their full range by the age of two.
The C-section infants had lower circulating levels of Th1 chemical messengers in their blood, indicating an imbalance between Th1 and Th2. "Failure of Th2 silencing during maturation of the immune system may underlie development of Th2-mediated allergic disease," write the authors who are Swedish scientists, , Dr Anders Andersson, at KTH Royal Institute of Technology, Solna Sweden and . Prof Lars. Engstrad at the Karolinska Institute, Stockholm, Sweden.

They point out that previous research has indicated that Bacteroides fragilis, one of the many Bacteroidetes, strongly influences the immune system, which ultimately enhances T cell activity and the Th1-Th2 balance."Thus, the lower abundance of Bacteroides among the C-section infants may be a contributing factor to the observed differences in the Th1-associated chemokines," they wrote.