- Pregnancy

Babies in the womb react differently to flavors — researchers

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LONDON, United Kingdom (AFP) — Babies in the womb are big fans of carrots but not so much leafy green vegetables — and show it in their faces, scientists said in a new study published Thursday.



Researchers at Durham University in northeast England said the findings were the first direct evidence that babies react differently to various smells and tastes before they are born.

A team of scientists studied 4D ultrasound scans of 100 pregnant women and discovered that babies exposed to carrot flavors showed "laughter-face" responses.

Those exposed to kale flavors in contrast showed more "cry-face" responses.

Lead postgraduate researcher Beyza Ustun said: "A number of studies have suggested that babies can taste and smell in the womb, but they are based on post-birth outcomes while our study is the first to see these reactions prior to birth.

"As a result, we think that this repeated exposure to flavors before birth could help to establish food preferences post-birth, which could be important when thinking about messaging around healthy eating and the potential for avoiding 'foodfussiness' when weaning."

Humans experience flavor through a combination of taste and smell.

In foetuses, it is thought that this might happen through inhaling and swallowing the amniotic fluid in the womb.

The study, published in the journal Psychological Science, included scientists from Durham's Fetal and Neonatal Research Lab and Aston University in Birmingham, central England.

A team from the National Centre for Scientific Research in Burgundy, France, was also involved.

The teams believe the findings could deepen understanding of the development of human taste and smell receptors as well as perception and memory.

Research co-author Professor Jackie Blissett, of Aston University, said: "It could be argued that repeated prenatal flavor exposures may lead to preferences for those flavors experienced postnatally.

"In other words, exposing the foetus to less 'liked' flavors, such as kale, might mean they get used to those flavors in utero."