That bad attitude? Blame the birth month

Numerous studies suggest a link between temperament and health and the month in which a person is born. If you’re overweight, you could be a winter baby.

By Marta Zaraska, Special to the Los Angeles Times
January 30, 2012

If you don’t believe in horoscopes, you’re in step with science. But that’s not the same as saying the season of your birth cannot affect your fate. Hundreds of studies, published in peer-reviewed journals, have suggested that the month a person is born in is associated with characteristics such as temperament, longevity and susceptibility to certain diseases.

Scientists say that even though some of these findings are probably spurious — if you dig around in data, you will eventually find correlations just by chance — other effects are...
very likely real, triggered not by the alignment of the planets but by exposures during prenatal and early postnatal lives.

Temperature, sunshine, seasonal foods, winter infections: All can affect the development of a baby and, as a result, its future. Here's a look at the findings and what scientists make of them.

Winter (Dec. 22 to March 20):

Body weight: Men with a few pounds to lose may have another excuse why that stubborn fat won't leave. David Phillips of the University of Southampton in England analyzed the weight of 1,750 British seniors and found that 13.8% of men with birthdays from January to March qualified as obese but only 9.4% of those born from October to December did so. In women, seasonal trends were less apparent. Phillips argues that exposure to low temperatures in early life might promote development of fatty tissue and predispose winter-borns to obesity in adulthood. Lab studies support his theory: Rats subjected to cold before or soon after birth store more ingested energy as fat, even when the temperature is no longer low.

Temperament: A 2004 psychological questionnaire of 448 men and women found that 20- to 45-year-olds born during the half year containing winter (October to March) are more likely to be novelty seekers — curious, hating monotony, apt to choose sky diving over Sudoku as a hobby. The same didn't apply to those older than 45: At these ages, winter-borns were less interested in novelty-seeking than summer-borns, suggesting they settle down faster. "Season of birth does influence temperament; we just don't know exactly why," says Lars-Göran Nilsson, a psychologist at Stockholm University in Sweden, who in 2001 published a study on this subject in the journal Neuropsychobiology. He thinks it has something to do with levels of serotonin and dopamine, key brain chemicals that seem to be involved in formation of personality. "Throughout the year, their production fluctuates in a mother's body and might affect development of a fetus," Nilsson says. Animal studies suggest the fluctuations are due to changes in day length.

Schizophrenia: The rate of this severe mental illness in the general population is about 1%. But those born in winter develop it at higher rates, an observation that dates to 1929 and has since been confirmed in more than 200 studies. One of these, published in 1999 in the New England Journal of Medicine, found that people born in the Northern Hemisphere in early March were 11% more likely to develop schizophrenia than those born in early June or early December. South of the equator, the pattern is reversed. A popular hypothesis blames prenatal infections, with some researchers pointing fingers at the seasonal flu and others at the summer and autumn epidemics of rubella, polio and diphtheria that could harm the fetus during the first trimester of pregnancy. People born in August and September have the lowest risk of schizophrenia.

Spring (March 21 to June 21)

Height: People born in spring tend to be taller, according to Gerhard Weber, an anthropologist at the University of Vienna. Analyzing Austrian Federal Army measurements of more than half a million men, he found that the tallest recruits were born in April, the shortest in October. Although the average difference was small (0.2 inch), the finding, reported in 1998 in the journal Nature, was statistically significant. Weber speculated in his study that the effect could be due to concentrations of the light-dependent hormone melatonin in the mother's body, which might stimulate secretion of growth hormones. Since human fetuses and babies grow in spurts, the amount of daylight during periods of fast development would be crucial.

Multiple sclerosis: Spring-borns have an elevated risk of this inflammatory disease, known to be caused by a combination of genetic and environmental factors. Studies have established that the higher the latitude of a country, the higher the prevalence of MS. How big a rise? Among Australian states, the risk in temperate Tasmania is fivefold that in subtropical Queensland, and a 2005 study of 17,874 Canadian and 11,502 British patients with MS found that those born in May have a 23% increased risk of developing MS compared with those born in November. The suspected cause: deficiency in maternal concentrations of vitamin D at the end of the second or third trimester.
Summer (June 22 to Sept. 22)

**Sleep habits:** Studies find that people whose birthdays fall in June to September are more likely to be evening than morning types when compared with those born in winter. A survey of 5,720 European students published in 2009 in the journal Sleep showed that those born in August went to bed 19 minutes later on average than December-borns. Study lead author Vincenzo Natale of the University of Bologna, Italy, argues that our internal clocks are set for life when we are born. Here’s how he thinks it works: In the summer, abundant sunlight influences the maturing of the brain’s circadian clock, setting it to a pattern of longer days. Experiments on mice support this theory, as does the finding that in Australia the patterns are shifted by six months. But the tendency to be an owl or lark is also strongly influenced by genes, Natale notes: "If someone genetically predisposed to being an evening type is born during summer, he will become an extreme evening type, but if he's born in winter, he will end somewhere in between an evening and a morning type."

**Handedness:** Summer- and spring-borns are more likely to be left-handed. A study published in 1994 in the journal Perceptual and Motor Skills examined handedness among males conscripted to the French army, male American baseball players and data collected by the U.S. Bureau of the Census and the National Center for Health Statistics. It showed that 41.2% of all left-handed people were born in the five months from March to July, but only 38.2% of all right-handed people. According to psychology professor Maryanne Martin (University of Oxford) and Gregory Jones (University of Warwick), authors of a 1999 study that confirmed these results, it’s not yet clear why such differences exist; possible factors include variations in maternal nutrition or exposures to sunshine, temperature or seasonal infections, such as flu or measles, during the second trimester of pregnancy.

Diabetes: Children born in summer (especially in August) are more likely to develop Type 1 diabetes, in which the body’s immune system kills off the cells in the pancreas that secrete insulin. This was shown in a 1999 study of Swedish children published in the Archives of Disease in Childhood. In a sample of 1,248 children with diabetes, there were 24 patients more than expected born in August and 33 less than expected born in October. Again, viral infections may be why: Mouse studies have shown, for example, that coxsackieviruses disturb the immune system and can induce diabetes.

Fall (Sept. 23 to Dec. 21)

**Life span:** If you’re born in the fall, you may have a better shot at living to a ripe old age. An example: A 2011 report in the Journal of Aging Research compared months of birth of 1,574 U.S. centenarians — people who have lived to 100 or beyond — and those of their spouses, brothers and sisters. "Siblings of centenarians born in September to November have 30 to 50% higher chances to live to 100 years compared to those born in March," says Leonid Gavrilov of the Center on the Demography and Economics of Aging at the University of Chicago, who coauthored the study with his wife, Natalia. He points to a variety of possible causes: maternal nutrition during the last months of pregnancy, seasonal infections, temperature during birth or conception and levels of vitamin D. All may influence the likelihood of health problems later in life.

**Allergies:** Scandinavian, Dutch and Japanese studies show a higher prevalence of food allergies in children born in fall or winter than in those born in summer. Allergy expert Dr. Milo Vassallo of Brooklyn, N.Y., reviewed cases of more than 1,000 patients at three Boston emergency rooms who had food-related acute allergic reactions. He found that fall and winter birth was associated with 53% higher odds of having a food allergy. He thinks it could be due to seasonal fluctuations in vitamin D, since deficiencies can weaken the immune system. The only two reliable sources of this vitamin are sunlight and supplements, so the risk will depend on where you live, he says: "Because of the higher latitude and more exaggerated fluctuations in sun exposure, children born in the fall and winter in Boston may be at increased risk than those in Los Angeles."

health@latimes.com

Copyright © 2012, Los Angeles Times

Share 2637

http://www.latimes.com/health/la-he-birth-season-20120130,0,533330.story
Maya Pinion at 10:59 AM February 02, 2012
Only in L.A. Pffit!

Anita Wynn at 10:33 PM February 01, 2012
Okay. I've always "known" that my personality traits were heavily influenced by my 3-week premature birth in early November and subsequent maternal deprivation while I was hospitalized in an "incubator." But am I now to believe that, should I live to be 100 (ugh!), my SISTER born in January can expect to live to a ripe old age? If this article makes sense, I'm a monkey's uncle. PLEASE cite the SCIENTIFIC sources for these claims, which make absolutely no sense when interpreted by reporters for us cretins in the general public.

St Apple at 3:21 PM January 31, 2012
As per usual those quick to dismiss the entire article didn't read the disclaimer
"Scientists say that even though some of these findings are probably spurious — if you dig around in data, you will eventually find correlations just by chance — other effects are very likely real, triggered not by the alignment of the planets but by exposures during prenatal and early postnatal lives.”
Look up the word “spurious” before rallying to burn the author at the stake for witchcraftery...

Comments are filtered for language and registration is required. The Times makes no guarantee of comments' factual accuracy. Readers may report inappropriate comments by clicking the Report Abuse link next to a comment. Here are the full legal terms you agree to by using this comment form.

Booster Shots

Stronger smell linked to smaller bites, vanilla-custard study says
Big science zooms in on a new cure for baldness
Israelis pose a no-skinny-models plan to target eating disorders
Should you take aspirin to prevent or treat cancer?
Electroshock: First glimpse of how it works adds clues to depression

£ L.A. for less than the price of sunblock. Only 99¢ for the first four weeks.

In Case You Missed It...
That bad attitude? Blame the birth month - latimes.com