# Experts explore environmental and nutritional factors in rising autism rates



Concerns are growing in the UK and internationally about a significant rise in children experiencing psychological, behavioural, and physiological challenges frequently diagnosed as autism spectrum disorder (ASD). While mainstream medical opinion often attributes this increase largely to genetic factors and improved diagnosis, a number of independent researchers and clinicians are suggesting that environmental and lifestyle influences may be playing a substantial role in the surge seen over recent decades.

Autism rates have risen dramatically in multiple countries. In the United States, the prevalence has increased from approximately 2 in 10,000 cases fifty years ago to 1 in 36 currently. The UK has witnessed a marked rise as well, with government estimates indicating that about 1 in 62 children are now classified as autistic—an eightfold increase over the past 20 years. School census data from Scotland and Northern Ireland reveal even higher rates, with around 1 in 20 children diagnosed, and 1 in 14 boys in Scotland identified with autism. These trends suggest environmental factors, including diet, may be contributing significantly to the rise and indicate the potential for prevention or risk reduction through targeted interventions.

In response to growing concerns, the US National Institutes of Health recently launched a major research initiative to investigate the causes of autism, aiming to understand better why diagnosis rates continue to climb. Meanwhile, in the UK, the mental health charity Food for the Brain convened a ‘Smart Kids’ conference on 24 April, bringing together global experts to examine the influence of diet, lifestyle, social media exposure, and pre-conceptual nutrition on neurodevelopmental conditions such as autism and ADHD.

Research from the University of Maryland, led by Dr Chris D’Adamo, highlights the impact of environmental factors on autism. His recent publication in the journal Personalized Medicine estimates a 300% increase in autism diagnoses since 2000 and reports on a case where early, tailored interventions addressing diet, environment, and lifestyle resulted in dramatic improvements. This involved twin toddlers displaying typical autism indicators—limited communication, repetitive behaviours, resistance to change, and severe gastrointestinal problems—who underwent a comprehensive program led by a multidisciplinary team. Both twins showed significant reductions in autism severity scores within months, demonstrating the potential for symptom reversal through modifiable factors.

Similarly, Dr Lorene Amet, a UK-based functional nutritionist and founder of The Lauriston Centre, has applied integrative approaches with reported remarkable success in over hundreds of families affected by autism. A 2014 survey conducted by the charity Thinking Autism, and later analysed by Queen Mary University academics, found that out of 237 families implementing various dietary interventions, 170 reported life-changing or significant improvements in their children’s symptoms, with only 12 reporting no noticeable changes.

Despite these promising findings, official UK health guidance from the National Health Service and the National Institute for Health and Care Excellence (NICE) currently states there is no cure for autism and does not recommend interventions such as vitamins, minerals, or dietary modifications as part of autism management. These guidelines limit treatment options for many families seeking alternative strategies.

Prevention, particularly before birth, is another focus of recent research. Associate Professor Michelle Murphy from Universitat Rovira I Virgili in Spain has identified a compelling link between maternal deficiencies in B vitamins during early pregnancy and an increased likelihood of autism-related traits in children. Children born to mothers with low pre-conception B-vitamin levels were more prone to withdrawn behaviours, anxiety, depression, and aggression by the age of six. Maternal nutrition’s role in neurological development has long been recognised—folic acid supplementation during pregnancy to prevent neural tube defects is standard advice, albeit implemented late and after avoidable birth defects occurred on a large scale. Children with autism are six times more likely to have experienced neural tube defects, reinforcing the connection between B-vitamin deficiency and neurodevelopmental issues.

Professor David Smith of Oxford University contributed earlier research demonstrating that B vitamins reduce homocysteine, a toxic amino acid associated with autism spectrum disorder, depression, cognitive impairments in children, and Alzheimer’s in adults. Professor Murphy’s work further suggests that even mildly elevated homocysteine levels—linked to inadequate B12 and folate intake—prior to conception strongly predict neurodivergent traits in children, emphasising the importance of pre-pregnancy nutritional screening.

A European Union study found that nine out of ten obese women failed to meet folic acid supplementation guidelines during early and pre-pregnancy, which would help prevent some neurodevelopmental disorders. Another EU study of 3,000 children revealed median serum B12 levels below what is deemed necessary for optimal brain development, with one third of children having levels at least half below the requirement. Deficiency appeared particularly prevalent in vegan children.

To support ongoing research and assist families, Food for the Brain is encouraging parents to participate in a free online assessment that evaluates their child’s cognitive, emotional, and behavioural functions, alongside diet and lifestyle questionnaires aimed at optimising brain health. Additionally, home testing kits to measure homocysteine levels are available to help identify possible nutritional challenges impacting brain function.

Dr Rona Tutt, OBE, trustee of Food for the Brain and former President of the National Association of Head Teachers, commented on the issue: “People come in assorted shapes and sizes, with brains that are unique. A significant minority who are neurodivergent need to be recognized, valued, and supported to maximize their strengths and overcome their challenges. Understanding the factors driving the rise in neurodivergence is key to ensuring the best outcomes for future generations.”

The recent ‘Smart Kids’ conference reflected a wider effort to explore environmental and nutritional strategies to potentially prevent or mitigate autism’s effects, highlighting a multidisciplinary approach to addressing the rise in neurodevelopmental conditions.

For parents and professionals seeking further information and resources, Food for the Brain provides access to the conference’s content and free assessments through their website.

Source: [Noah Wire Services](https://www.noahwire.com)

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