

# Nutrition and Diet support strategies for Children and families with ADHD and other neurodevelopmental conditions

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Children with ADHD and ASD often have unique relationships with food. These challenges are real, common, and not the child's fault.

Understanding why eating is difficult can help families support healthier, happier mealtimes.

## 1 Sensory Sensitivities: Food Can Feel “Too Much”

Many autistic or ADHD children experience the world more intensely.

Food can overwhelm their senses:

Textures may feel “wrong,” mushy, lumpy, gritty, or unpredictable

Smells can be too strong or unpleasant

Colours or mixed foods may be visually overwhelming

Sounds at mealtime can make it hard to stay calm

Because of this, children may prefer:

plain foods

crunchy foods

beige or predictable foods

the same foods every day

This isn't being picky — it's trying to feel safe and comfortable.

## 2 Routine, Predictability & Preference for “Safe Foods”

Neurodivergent children often feel secure with sameness.

Changing a familiar food can trigger anxiety.

They may:

eat only a few preferred foods

avoid foods that look different today than yesterday

refuse foods with “bits,” mixed textures, or sauces

Predictability helps them feel in control.

## 3 Differences in Appetite Regulation

Children with ADHD and ASD may struggle to notice:

hunger

fullness

thirst



Why?

Low interoception (difficulty sensing internal signals)

Hyperfocus during play or tasks

Medication that reduces appetite

Stress, which can shut down appetite

This can lead to:

skipping meals

overeating suddenly

eating only when reminded

emotional meltdowns linked to hunger

## 4 Executive Function Challenges

ADHD can make even simple tasks feel hard. Eating requires many steps:

choosing food

preparing it

sitting still

using cutlery

dealing with mess

staying focused

coping with taste & texture

Children may avoid eating because the process feels overwhelming, not the food itself.

## 5 Anxiety Around New Foods

Trying new foods can be stressful. This anxiety is real and rooted in:

sensory fear ("what if it feels wrong?")

past negative experiences (gagging, choking, strong smells)

difficulty handling surprises

fear of losing control

Pushing or forcing often makes this worse.

## 6 Emotional Regulation & Eating

Children with ADHD or ASD may eat differently depending on their emotional state:

overstimulation → loss of appetite

boredom → grazing/snacking

anxiety → refusing meals

sensory overload → craving "safe" foods

Food becomes part of emotional coping, not just nutrition.



## 7 Limited Diets Can Lead to Nutrient Gaps

Because of sensory issues, small food ranges, and unpredictable appetite, neurodivergent children often get less of certain nutrients, especially:

Omega-3 fats  
Iron  
Zinc  
Magnesium  
Vitamin D  
Fibre  
B-vitamins  
Protein (sometimes)

These nutrients support:

energy  
mood  
sleep  
brain development  
immune system  
digestion

A limited diet doesn't mean you're failing — it simply means extra support may be needed.

## 8 It's Not Bad Behaviour — It's a Different Neurotype

Eating difficulties in ADHD and ASD are:

- sensory based
- neurological
- developmental
- emotional
- physiological

They are not:

- naughtiness
- defiance
- disrespect
- "fussiness"
- parenting problems

Understanding this reduces stress and opens the door to calmer mealtimes.



### **You are not alone**

Eating challenges are one of the most common experiences for neurodivergent families. With understanding, patience, and gentle support, children can learn to feel safer and more confident around food at their own pace.

## **How Nutrition Can Support ADHD and ASD**

### **Stabilizing Energy & Blood Sugar:**

Individuals with ADHD often experience energy crashes, impulsive eating, and irritability linked to blood sugar fluctuations. Balanced meals that include whole grains, oats, fruits, yogurt, nuts, and lean protein can help maintain steady blood glucose levels, improving focus, mood stability, and sustained energy.

### **Supporting Neurotransmitters:**

Key brain chemicals such as dopamine, serotonin, and norepinephrine regulate attention, memory, motivation, and mood. Nutrients essential for their production include protein (amino acids), B-vitamins (B6, B9, B12), iron, zinc, and magnesium. Deficiencies may contribute to brain fog, fatigue, low mood, and difficulty focusing.

### **Supporting Brain Structure & Function:**

The brain's high fat content means healthy fats, particularly omega-3 fatty acids (EPA & DHA), are crucial for cell communication, inflammation control, and brain development. Rich sources include oily fish (salmon, sardines, mackerel), chia seeds, walnuts, and flaxseed. Increased omega-3 intake may offer modest improvements in attention and mood, especially in those with low baseline levels.

### **Reducing Gut-Brain Stress:**

Many individuals with ADHD or ASD experience digestive sensitivities or IBS-like symptoms. A healthy gut environment supports mood, sleep, and stress tolerance. Dietary strategies include consuming fiber-rich foods (oats, vegetables, fruits), fermented foods (yogurt, kefir, sauerkraut), and maintaining consistent meal patterns.

### **Enhancing Sleep Quality:**

Sleep difficulties are common in ADHD and ASD. Nutritional support includes magnesium to relax the nervous system, foods high in tryptophan (turkey, eggs, dairy), and avoiding caffeine and high-sugar foods near bedtime. Improved sleep correlates with better emotional regulation and focus.

### **Supporting Sensory & Eating Challenges (particularly in ASD):**

Selective eating, sensory sensitivities, and restricted diets can lead to nutrient gaps, notably in iron, zinc, vitamin D, magnesium, omega-3 fatty acids, and fiber. Addressing these deficiencies may enhance immunity, energy, digestion, and overall well-being.

### **Reducing Inflammation & Oxidative Stress:**

Elevated inflammation and oxidative stress may be present in some autistic individuals. Antioxidant nutrients such as vitamins C and E, polyphenols found in berries, olive oil, and herbs, along with omega-3 fatty acids, can help mitigate these effects.



## Nutrients Commonly Low in ADHD & ASD

### Omega-3 Fatty Acids (EPA & DHA)

Frequently low in both ADHD and ASD

Crucial for brain cell communication, mood regulation, and attention

Many neurodivergent individuals consume little oily fish

Sources: salmon, sardines, mackerel, flaxseed, chia seeds, walnuts

### Iron

Low iron reduces dopamine signalling, impacting focus, energy, and mood

Commonly low in individuals with restricted diets, low meat intake, or menstruation

Sources: red meat, beans, spinach, sardines, fortified cereals

### Zinc

Supports dopamine metabolism, appetite regulation, and taste/smell sensitivity

Low levels linked to attention difficulties and selective eating patterns

Sources: pumpkin seeds, meat, seafood, cheese, lentils

### Magnesium

Supports calmness, sleep, sensory regulation, and muscle relaxation

Deficiency can contribute to restlessness, anxiety, and constipation

Sources: oats, nuts, seeds, whole grains, dark chocolate

### Vitamin D

Often low in the general population, with higher prevalence in ADHD/ASD due to indoor routines, sensory avoidance of sunlight, picky eating, and gut absorption issues

Important for mood, immunity, inflammation, and energy

Sources: sunlight, fortified foods, oily fish, supplements

### B-Vitamins

Especially B6 (neurotransmitter production), B12 (energy & cognition), and Folate/B9 (methylation, mood, brain development)

Low levels may cause fatigue, brain fog, irritability, and mood dips

Sources: eggs, meat, whole grains, leafy greens, fortified cereals



## Choline

Essential for memory, attention, and brain development

Often low if eggs or meat are avoided

Sources: eggs, chicken, fish, soy, peanuts

## Calcium

Low levels common with dairy avoidance, limited diet, or sensory aversions

Important for nerve signalling, bone health, and muscle function

Sources: dairy, fortified plant milks, tofu, leafy greens

## Iodine

Often low in those avoiding dairy or fish or using non-iodised salt

Vital for thyroid function, affecting energy and cognition

Sources: dairy, fish, eggs, iodised salt, seaweed

## Fibre

Frequently low due to avoidance of vegetables, fruit, and beans or preference for "beige foods" (pasta, bread, chips) and texture sensitivities

Low fibre affects digestion, mood, inflammation, and gut–brain health

Sources: oats, fruit, vegetables, beans, whole grains, seeds

## Gut-Friendly Foods

Gut-friendly foods play an important role in supporting digestion and overall well-being. Luckily, many of these foods are easy to find in UK supermarkets and shops, making it simple to include them in everyday meals and snacks.

Fermented foods, like live yoghurts (such as Yeo Valley Organic or Onken Bio) and kefir (available from brands like Biotiful or supermarket own-brands), are great sources of natural probiotics — the friendly bacteria that help keep our guts balanced. You might also spot sauerkraut and kimchi in some supermarkets (brands like Biona and The Korean Pantry), which are tasty options to try if you're curious. Kombucha drinks (like Remedy or L.A. Brewery) and miso paste (such as Clearspring) also offer gut-supporting benefits and can be easily added to meals or enjoyed on their own.

When it comes to fruit, there are plenty of high-fibre options that support digestion. Apples, pears, and berries (like blueberries, raspberries, and strawberries) are easy to enjoy fresh or in smoothies. Bananas, especially when they're slightly underripe, contain something called resistant starch, which is great for feeding your good gut bacteria. Oranges are another delicious choice packed with fibre and vitamin C.

Vegetables are another key part of a gut-friendly diet. Broccoli, carrots, leeks, onions, garlic, spinach, kale, cabbage, and sweet potatoes are all rich in fibre and nutrients that promote a healthy digestive system.



Including a variety of these vegetables across your meals can help maintain regular digestion and provide lots of vitamins too.

Some foods are known as prebiotics, meaning they actually feed the beneficial bacteria already living in our guts. Wholegrain oats, barley, seeded or rye bread, and vegetables like chicory root, Jerusalem artichokes, and asparagus fall into this category. Beans and pulses such as chickpeas, lentils, and black beans also make excellent prebiotic choices, and they're wonderful sources of plant-based protein.

Speaking of grains, wholegrains like wholegrain oats, brown rice, wholewheat pasta, quinoa, bulgur wheat, and rye bread (such as Biona or bakery fresh options) are fantastic for fibre and slow-release energy.

Swapping refined grains for wholegrain versions is a simple change that can benefit your gut and keep you feeling fuller for longer.

Don't forget about healthy fats, which support not only digestion but also brain health. Olive oil is a staple in many kitchens and pairs well with salads and cooking. Nuts like almonds, walnuts, and pistachios, as well as seeds such as chia, flax, pumpkin, and sunflower seeds, make great snacks or toppings. Avocados are creamy, nutrient-rich, and easy to add to toast or salads.

Another group of gut-friendly foods includes those rich in polyphenols — natural compounds that support beneficial gut bacteria. Green tea, dark chocolate (choose varieties with 70% cocoa or more), olive oil, berries, red grapes, and spices like turmeric, ginger, cinnamon, and rosemary all offer these benefits. These foods add flavour and variety while quietly supporting gut health.

For families looking to increase their intake of plant-based proteins, lentils, chickpeas, black beans, edamame, tofu, and tempeh are delicious and versatile. They're not only good for digestion but also provide important nutrients that help keep energy levels steady throughout the day.

Lastly, when hunger strikes between meals, fibre-rich snacks can keep tummies satisfied and digestion on track. Mixed nuts, popcorn, oatcakes (like those from Nairn's), and hummus with vegetable sticks make tasty, nourishing options that the whole family can enjoy.



Below is a list of possible food that may support a healthy gut and therefore a healthy ADHD brain.

### Gut-Friendly Foods

#### 1. Fermented Foods (Probiotics)

- Live yoghurt (e.g., Yeo Valley Organic, Onken Bio)
- Kefir (Biotiful, Yeo Valley Kefir, supermarket own-brand)
- Sauerkraut (Biona, The Cultured Collective)
- Kimchi (The Korean Pantry, Vadasz)
- Kombucha (Remedy, L.A. Brewery)
- Miso paste (Clearspring)

#### 2. High-Fibre Fruits

- Apples
- Pears
- Berries (blueberries, raspberries, strawberries)
- Bananas (especially slightly underripe for resistant starch)
- Oranges

#### 3. High-Fibre Vegetables

- Broccoli
- Carrots
- Leeks
- Onions
- Garlic
- Spinach
- Kale
- Cabbage
- Sweet potatoes

#### 4. Prebiotic Foods (feed good bacteria)



- Oats
- Barley
- Wholegrain bread (e.g., seeded or rye bread)
- Chicory root (often in fibre supplements)
- Jerusalem artichokes
- Asparagus
- Beans and pulses (chickpeas, lentils, black beans)

#### 5. Wholegrains

- Wholegrain oats
- Brown rice
- Wholewheat pasta
- Quinoa
- Bulgur wheat
- Rye bread (e.g., Biona or supermarket bakery)

#### 6. Healthy Fats

- Olive oil
- Nuts (almonds, walnuts, pistachios)
- Seeds (chia, flax, pumpkin, sunflower)
- Avocados

#### 7. Polyphenol-Rich Foods (support gut bacteria)

- Green tea
- Dark chocolate (70%+)
- Olive oil
- Berries
- Red grapes
- Herbs & spices (turmeric, ginger, cinnamon, rosemary)

#### 8. Plant-Based Protein Sources



- Lentils
- Chickpeas
- Black beans
- Edamame
- Tofu & tempeh

#### 9. Fibre-Rich Snacks

- Mixed nuts
- Popcorn
- Oatcakes (e.g., Nairn's)
- Hummus with veg sticks

## Guide to Picky Eating & Sensory-Safe Foods (ADHD & ASD)

Understanding picky eating is important: it's never about laziness or stubbornness. For many children with ADHD or autism, food preferences come from real sensory and neurological reasons. They might be sensitive to textures or smells, have an inconsistent appetite, or find it hard to notice when they're hungry or full. Some also struggle with executive functioning, which makes the steps involved in eating feel overwhelming. Fear of unfamiliar or unpredictable food textures and digestive challenges can also play a big role. This guide is designed to help families navigate these challenges in a gentle, practical way.

First, having a set of "sensory-safe" go-to foods can really help. These are foods that are predictable, mild in smell and flavour, and comfortable to eat. For protein, this might include things like chicken goujons, fish fingers, scrambled or boiled eggs, Greek yoghurt, cottage cheese, nut butters, smooth hummus, tofu, or sliced turkey. Carbohydrate choices that work well are plain pasta, rice, noodles, mashed potato, toast, plain crackers, bagels, and cereals like Rice Krispies or Cheerios. Fruits that tend to be easier include bananas, blueberries, peeled apple slices, strawberries, tinned fruit in juice, and smoothies. Vegetables that are low in smell and simple in texture such as carrot sticks, cucumber, peas, sweetcorn, roast potatoes, blended sauces, or smooth vegetable soups are also good options.

For children with ADHD, eating can be more about the effort than the food itself. Meals that are simple to prepare and eat, with minimal clean-up, can reduce stress and help maintain regular nutrition. Examples include microwave rice with rotisserie chicken and frozen vegetables, pasta with butter and cheese, cheese toasties, smoothies with yoghurt and fruit, instant oats with peanut butter, wraps with chicken and lettuce, pre-cut fruit packs, or Greek yoghurt with honey and granola. These options keep meals manageable for busy or tired brains.



When expanding the variety of foods, using a “texture ladder” can make the process less overwhelming. Instead of pushing a child from eating only one food to trying everything at once, this method introduces small, gradual steps. For example, with chicken, you might start with nuggets, then lightly seasoned nuggets, followed by grilled strips, pulled chicken, and eventually home-cooked pieces. For fruit, you could move from smoothies to blended fruit pouches, then soft fruits like banana, berries, and finally apple slices. This gentle progression helps reduce sensory shock and builds confidence.

Adding flavour and texture modifiers can also help new foods feel safer. Adding a bit of crunch like croutons, crackers, crispy onions, or toasted breadcrumbs can make textures more familiar. Creamy additions such as yoghurt, cream cheese, mashed potato, or avocado can smooth out unfamiliar textures. Adding familiar flavours like ketchup, cheese, butter, or a favourite seasoning can help make new foods more acceptable. Combining a familiar taste with an unfamiliar food often makes the experience less intimidating.

It’s helpful to know some common sensory triggers that many neurodivergent people find challenging. Strong smells like fish, cabbage, or vinegar; mixing wet and crunchy textures; unpredictable foods like grapes or mixed dishes; gritty vegetables such as spinach or kale; and foods with bits like pulp or onion chunks can be difficult to tolerate. Finding alternatives that avoid these triggers but still provide good nutrition is possible and can make mealtimes easier.

If a child struggles with certain food groups, there are nutrition workarounds that can help. For example, if vegetables are hard to manage, smoothies with hidden spinach, blended soups, pasta sauces with blended vegetables, veggie crisps, or fortified cereals can add nutrients without triggering sensory issues. For those who avoid meat, alternatives like yoghurt, cheese, nut butters, lentil pasta, tofu nuggets, or eggs provide important protein. If fibre is a problem, oats, bananas, berries, wholegrain crackers, chia pudding, and beans blended into dips can improve digestion. For iron, fortified cereals, eggs, beans, or sardines (if tolerated) can help address common gaps.

One easy way to reduce mealtime anxiety is the “Safe Food Plate” method. Each meal includes one safe food (something the child is comfortable eating), one familiar food, and one optional “try” food that the child can taste if they want — but with no pressure to eat it. For example, a plate might have pasta with butter as the safe food, chicken goujons as the familiar food, and a spoonful of peas as the optional try. This approach keeps mealtimes calm and encourages gentle exploration.

Finally, compassionate eating rules make a big difference. It’s important to avoid pressuring a child to “just try it,” forcing them to eat, or making them feel guilty about their food choices. Food isn’t about “good” or “bad” — it’s about what works for that child’s body and brain. Celebrate even the smallest wins, like looking at a new food or smelling it, and remember that sensory needs are real, not behavioural problems. Patience and understanding help children feel safe and supported around food.