

How Protein and a Balanced Diet Support ADHD – Especially on Medication, Insulin Levels, and Sensory Challenges

If your child has ADHD and takes medication, you may have noticed their **appetite changes throughout the day**. Many ADHD medications **suppress hunger**, meaning children may eat less during school hours and then experience **evening hunger spikes**.

Food plays a crucial role in **brain function, energy levels, and focus**, and it also affects **insulin levels**, which directly impact **energy, mood, and concentration**. Additionally, some

children have **sensory processing issues** that make them more sensitive to certain textures and tastes, which can further complicate their eating habits.

In this post, we'll break down:

- Mow much protein a child needs for optimal brain function
- Why protein is essential for ADHD
- ✓ How ADHD medication affects appetite and energy
- Mow insulin levels influence focus and energy crashes
- Why sugar and processed foods make symptoms worse
- Mow to help children with sensory issues get enough protein
- 🔽 A meal plan tailored for a junior school child in South Africa

How Much Protein Does a Child with ADHD Need?

The recommended daily protein intake for a junior school-aged child (6–12 years old) is:

Boys: 19–34g of protein per day
Girls: 19–34g of protein per day

However, children with ADHD may benefit from slightly **higher protein intake**, especially if they struggle with energy crashes or hyperactivity. A good target is around **1–1.5g of protein per kg of body weight**. For example:

✓ A 25kg child should aim for 25–37g of protein per day
 ✓ A 35kg child should aim for 35–52g of protein per day

The Role of Protein in ADHD and Why It's Crucial

Protein is the **building block of neurotransmitters** like **dopamine** and **norepinephrine**, which regulate **attention**, **mood**, **and impulse control**. These neurotransmitters are **naturally lower in children with ADHD**, which is why they often struggle with **focus**, **hyperactivity**, **and emotional regulation**.

When your child eats enough protein, it helps:

- Keep energy levels stable
- Support brain function and memory
- Improve focus and concentration
- Reduce hyperactivity and impulsivity

The Role of Insulin in ADHD

Insulin is a **hormone that controls blood sugar levels**. When children eat high-sugar or processed foods, insulin spikes **rapidly**, causing:

- A sudden burst of energy (temporary hyperactivity)
- ↓ A sharp drop in blood sugar (leading to tiredness, mood swings, and loss of focus)

When insulin spikes, it also reduces the availability of **amino acids (the building blocks of protein)** in the brain. This **blocks important neurotransmitters like dopamine from doing their job**, making it even harder for children to **focus and regulate emotions**.

- Protein Helps:
- Prevents insulin spikes, keeping energy and focus stable
- Supports amino acids crossing the blood-brain barrier, helping neurotransmitter production
- ☑ Balances mood and prevents extreme hunger or fatigue

Children with Sensory Processing Issues and Protein Intake

Some children with ADHD also have **sensory processing difficulties**. These are not the same as being a "picky eater." A child with **sensory sensitivities** may:

- O Dislike certain textures (e.g., eggs, meat, or fish)
- Struggle with mixed foods (like a stew or casserole)
- Only eat a very specific selection of foods

How to Work Around Sensory Sensitivities

Instead of forcing certain textures, experiment with alternative protein sources:

- ✓ Smoothies with protein powder (blend with banana, peanut butter, or yogurt)
- ✓ Protein-enriched ice cream shakes (blend full-cream ice cream with protein powder and milk)
- ✓ **Nut butters and seed butters** (spread on toast, mix into porridge)
- ✓ Egg muffins or pancakes (can be disguised with banana)
- ✓ Mince or shredded meats (easier to chew than steak or chicken breast)
- ✓ Lentil-based soups or hidden veggie sauces (blended for smoother texture)

The Role of Low-GI Foods in ADHD

Low-GI (glycaemic index) foods **release energy slowly**, preventing blood sugar spikes and crashes. These foods help:

- ✓ Sustain focus for longer periods
- ✓ Prevent hyperactivity caused by sugar highs
- ✓ Keep energy levels stable throughout the school day

Good low-GI carbohydrate options include:

- **Vegetables** (broccoli, spinach, carrots)
- **Whole grains** (brown rice, oats, wholewheat bread)
- **Legumes** (lentils, chickpeas, beans)
- **Fruits** (apples, pears, berries instead of sugary juices)

South African ADHD Meal Plan for a Junior School Child

This meal plan is designed for a **child who takes ADHD medication**, has a **low appetite during school hours**, and needs **sustained energy for focus and activities**.

Morning (Before School - Essential for Focus!)

- **Goal:** High-protein breakfast to keep blood sugar stable, support medication, and prevent insulin spikes.
- Option 1: Scrambled eggs with wholewheat toast and a slice of cheese (15g protein)
- **Option 2:** Greek yogurt with nuts and a drizzle of honey (12g protein)
- **Option 3:** Peanut butter and banana smoothie with protein powder (18g protein)

🎒 Lunchbox (During School - Small, Easy-to-Eat Foods)

- **Goal:** Light, nutrient-dense snacks that provide fuel without overwhelming their reduced appetite.
- **Option 1:** Chicken strips with cucumber and cheese cubes (14g protein)
- Option 2: Trail mix (biltong, nuts, dried fruit avoid added sugars) (10g protein)
- Option 3: Hard-boiled egg with Provitas and hummus (12g protein)

After-School (Post-Medication "Catch-Up" Meal)

Goal: A nutrient-dense meal to **replenish energy after medication wears off** and support **neurotransmitter function**.

- Option 1: Mince on brown rice with avocado slices (18g protein)
- Option 2: Tuna mayo on wholewheat toast with carrot sticks (20g protein)
- **Option 3:** Chicken and cheese wrap with lettuce (16g protein)

Afternoon (Snack Before Homework or Sports)

Goal: A light, balanced snack to support brain function for studying or energy for physical activity.

- Option 1: Banana and peanut butter (8g protein)
- Option 2: Cheese and apple slices (10g protein)
- **Option 3:** Handful of nuts and a glass of full-cream milk (15g protein)

Dinner (Winding Down for Sleep)

Goal: A calming meal with protein and healthy fats to support sleep and brain recovery.

- Option 1: Grilled fish with mashed sweet potatoes and steamed broccoli (20g protein)
- **Option 2:** Beef stew with butternut and brown rice (22g protein)
- **Option 3:** Lentil soup with wholewheat toast (18g protein)

Final Takeaway

- ✓ Aim for at least 1–1.5g of protein per kg of body weight
- ✓ Use protein smoothies and shakes for sensory-sensitive kids
- ✓ Focus on low-GI foods to sustain energy
- ✓ Limit sugar to prevent hyperactivity and crashes

Making small changes to your child's diet can **significantly improve their focus, mood, and energy levels**.

→ Would you like more ADHD-friendly recipes or snack ideas? Let me know in the comments!
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