

A PRACTICAL GUIDE FOR PARENTS

# Energy support in children with autism

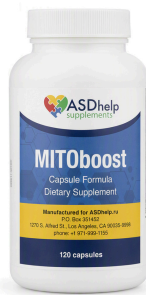
Understanding mitochondria, recognizing patterns and choosing a format your child can take.

**Small power stations. Everyday energy.**

Clear explanations • Six product profiles • Two templates to fill in with your clinician



**MITOboost Protein Powder**



**MITOboost Capsules**



**Magnesium L-Threonate+**

**01**

Understand the biology

**02**

Recognize the signs

**03**

Build a useful plan

**04**

Six product profiles

**05**

Two templates to fill in

MITOboost as a drink or in capsules, one magnesium, and additions only for an identified need. Templates for the plan your clinician sets, with ordering links.

# Your child's cellular power stations

Energy for movement, learning, digestion and growth.

Mitochondria are tiny structures inside cells. They turn nutrients from food into ATP, the usable energy that lets cells do their jobs. The brain, muscles, heart and digestive system all rely on a steady supply.



## Mitochondrial disease

Primary mitochondrial disease is caused by genetic changes that affect mitochondrial function. It is a medical diagnosis that may involve one or several organs.

## Mitochondrial dysfunction

A broader description of abnormal mitochondrial function. It can occur with primary disease or secondarily, alongside another illness or cellular stress.

The terms are related but not interchangeable. Dysfunction does not mean an inherited disease or a permanent energy deficit, and some studies describe a subgroup of autistic children with unusually high mitochondrial activity and increased sensitivity to stress

([Rose 2018, PMID 30039193](#); [Frye 2024, PMID 38703861](#)).

## What does autism research show?

A systematic review estimated mitochondrial disease in about 5% of the autistic children represented in the included studies, with abnormal biochemical markers such as lactate more frequent than disease itself ([Rossignol 2012, PMID 21263444](#)). A 2024 meta-analysis of 204 articles found group-level differences in several markers between autistic and non-autistic children, with wide variation ([Frye 2024, PMID 38703861](#)). These are historical and group estimates, not rates for every autistic child.

### A research marker is not a diagnosis

Findings vary by test and study population. Autism alone does not establish mitochondrial dysfunction. Every child needs basic health support; specialised treatment depends on individual findings.

# Patterns worth noticing

Compare your child with their own usual abilities.

A child who cannot describe exhaustion may sit down repeatedly, avoid familiar activities or need longer to recover. Record the change and when it happens. Watch for a persistent pattern, especially when several areas of health are affected.

**Unusual fatigue or poor stamina.** Exhaustion after ordinary play, walking or climbing stairs.

**Muscle weakness or motor difficulties.**

Difficulty rising from the floor, keeping posture or keeping up with familiar movement.

**Loss of established skills.** A sustained loss of language, movement or daily living abilities, particularly around an illness.

**Several medical symptoms together.** Seizures, digestive symptoms or poor growth alongside marked fatigue or weakness.

These features have been described in autism with mitochondrial abnormalities, but they are not specific to mitochondria. Poor sleep, anemia, pain and other conditions produce similar problems ([Rose 2018, PMID 30039193](#); [Sue 2022, PMID 34505344](#)).

**Seek urgent care** for a sudden loss of skills, severe new weakness, breathing difficulty, difficulty waking, a first or prolonged seizure, or persistent vomiting with an inability to keep fluids down.

# Support starts with the basics

Good nutrition, sleep and appropriate activity matter for every child.

There is no single routine test that diagnoses mitochondrial disease. A clinician reviews symptoms, growth, family history and examination findings; selected blood or urine tests and, when indicated, genetic testing can help. An abnormal lactate result is not a diagnosis, and a normal result does not always exclude disease ([Bhai 2025, PMID 40177789](#); [Parikh 2015, PMID 25503498](#)).

## Meet everyday energy needs

Provide enough food and fluids, address a restricted diet, investigate persistent sleep difficulties, and match activity to your child's ability; breaks support participation. A dietitian helps when intake is narrow, weight gain is poor or several supplements overlap ([Sue 2022, PMID 34505344](#)).

Supplements have different roles. Correcting a deficiency is different from using a broad combination. Some mitochondrial plans include CoQ10, selected B vitamins or carnitine, but evidence for universal combinations is limited ([Parikh 2015, PMID 25503498](#)). One small randomized trial reported possible benefits from L-carnitine in autistic children at 50 mg per kilogram a day for three months; that is a trial dose, far above the label amounts in the products here, and it does not establish a need in every child ([Geier 2011, PMID 21629200](#)).

**Track practical outcomes.** Note stamina, recovery after activity, sleep, appetite, bowel comfort and participation. Introduce one product at a time so that benefits and unwanted effects are easier to interpret.

## Using this guide

The two templates at the end organise product formats and timing. They are not a validated treatment protocol for autism or mitochondrial disease. A pediatric clinician selects the products and the daily amounts for your child.

# MITOboost Protein Powder

A strawberry drink for children who do not swallow capsules.



MITOboost Protein Powder

## Nutrition plus selected energy cofactors

Rice protein with a full vitamin and mineral panel, plus N-acetylcysteine, acetyl-L-carnitine and alpha-lipoic acid, mixed into water or another suitable drink.

**Per full label scoop (29.6 g):** 15 g protein, 75 mg magnesium, 600 mg NAC, 500 mg acetyl-L-carnitine, 200 mg alpha-lipoic acid, with B vitamins, zinc and vitamin D. Label amounts, not a pediatric dose.

## Why parents may prefer the drink

No capsule swallowing. Protein and a broad nutrient panel in one glass, practical when appetite is small or a child prefers liquids. A supplement to a healthy diet, not a meal replacement.

### Three after-meal portions

If the clinician chooses this schedule, divide the child's prescribed daily amount into portions after breakfast, lunch and dinner. Do not give a full scoop three times a day: the label says once daily, or as recommended by a healthcare professional.

Drink and capsules differ: the drink carries protein, vitamins and minerals; the capsules carry CoQ10 and creatine. Not interchangeable scoop for capsule, and never both. Not for infants or the severely immunocompromised; Prop 65 notice.

[Order MITOboost Protein Powder →](#)

### FORMAT

Powder

### PACK SIZE

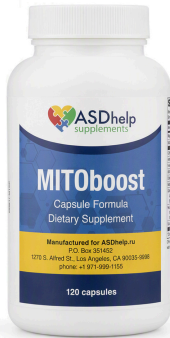
414 g

### ROLE IN THE PROTOCOL

Core, drink route. Never with the capsules.

# MITOboost Capsules

A focused cofactor blend without the shake base.



MITOboost Capsules

## Cellular energy and antioxidant support

CoQ10, acetyl-L-carnitine, NAC, alpha-lipoic acid, creatine, malic and succinic acids, and plant polyphenols (quercetin, red grape extract).

**Per four-capsule label serving:** CoQ10 50 mg, acetyl-L-carnitine 200 mg, NAC 100 mg, alpha-lipoic acid 100 mg, creatine monohydrate 200 mg, magnesium 45 mg. Children: amount selected by a healthcare professional.

## Where this format fits

For a child who swallows capsules reliably, and for adults. The adult label direction is four capsules daily with food; this is not a default children's dose. Because the capsules carry no protein, vitamins or trace minerals, B Complex and Trace Minerals can sit beside them when there is a reason.

### Opening capsules

Some powder-filled capsules can be opened and mixed into a little water or soft food. Have the manufacturer or a pharmacist confirm first; the website gives no opening instructions. Give the whole mixture promptly. Difficulty swallowing also needs assessment; opening a capsule does not resolve a swallowing disorder.

[Order MITOboost Capsules →](#)

#### FORMAT

Capsules

#### PACK SIZE

120 capsules

#### ROLE IN THE PROTOCOL

Core, capsule route. Never with the drink.

# Choose the magnesium format

Two powders with different purposes. Use one.



Magnesium L-Threonate+



Magnesium Night

## Magnesium L-Threonate+ Powder

Three magnesium forms, L-threonate (Magtein), malate and lysinate glycinate, and nothing else. One level scoop supplies 200 mg of elemental magnesium. The protocol's default magnesium; a child's daily amount is selected individually.

## Magnesium Night

300 mg of magnesium per scoop with Montmorency tart cherry, California poppy and lavender: a bedtime blend, not a plain magnesium powder. An alternative for the evening when both the magnesium and the botanicals suit the child; the botanicals need a practitioner's review for children. Not with other sleep products.

### Use one magnesium option

Count the magnesium already in MITOboost (75 mg per scoop of the drink, 45 mg per capsule serving) and in other products. Kidney disease, medication interactions and loose stools are reasons for the clinician to review the plan.

Magnesium is involved in normal energy metabolism, nerve signalling and muscle function. That role does not mean more is better, or that a powder has proven benefits for autism.

[Magnesium L-Threonate+ →](#)

[Magnesium Night →](#)

#### FORMAT

Powder / Powder

#### PACK SIZE

3.60 oz (102 g) / 180 g (6.3 oz)

#### ROLE IN THE PROTOCOL

Core, week 2: one magnesium, never both.

# B vitamins and trace minerals

Add for an identified need, never automatically.



Spectrum B Complex + Benfotiamine



Trace Minerals (ages 14+)

## Spectrum B Complex + Benfotiamine

B vitamins contribute to normal energy metabolism. Benfotiamine with B1, B2, B6 as P5P, methylfolate and methyl-B12 and the other B vitamins. Per capsule: B6 20 mg, niacin 140 mg, B12 400 mcg, benfotiamine 20 mg. No separate children's dose on the label.

## Trace Minerals, ages 14 and over

An iron-free blend of eleven trace elements that serve as cofactors in enzyme and antioxidant systems. Per capsule: zinc 30 mg, selenium 200 mcg, iodine 200 mcg. The label states: not for anyone under 14. For eligible teens, total nutrient intake still needs review.

### Check overlap before combining

The MITOboost drink already contains B vitamins and trace minerals, so neither product belongs beside it. With the capsules, one B6 source and one zinc source per person: Trace Minerals is not taken with Gut Restore, Formula C or D-Tox Complex on the same day.

These profiles describe ingredients and label directions. The combinations shown have not been established by clinical trials as treatments for autism or mitochondrial disease.

[Spectrum B Complex →](#)

[Trace Minerals, 14+ →](#)

### FORMAT

Capsules / Capsules

### PACK SIZE

90 vegetarian capsules / 30 capsules

### ROLE IN THE PROTOCOL

Optional, capsule route only, one at a time.

# For children who take powders

MITOboost Protein Powder plus one magnesium powder.

## After breakfast, lunch and dinner

If prescribed, divide the child's total daily MITOboost powder amount into three after-meal portions. Mix each measured portion into an amount of water or a suitable drink the child can finish.

## Magnesium at the agreed time

Use the selected daily amount of Magnesium L-Threonate+ Powder at the time agreed with the clinician. Magnesium Night may replace it when the bedtime blend is suitable; never both.

Keep this plan simple. Do not add B Complex or Trace Minerals to a drink that already contains these nutrients. Introduce the two products separately, a week apart, and follow tolerance, sleep, appetite and stamina.

### Write the individualised plan

MITOboost powder, total per day

.....

Amount after each meal

.....

Magnesium product + daily amount

.....

Started on

.....

Review date

.....

[Order MITOboost Powder →](#)

[Order Magnesium Powder →](#)

# For children who swallow capsules

MITOboost Capsules plus individually selected additions.

**With food:** the clinician-selected daily amount of MITOboost capsules on the agreed meal-time schedule. The label's adult four-capsule serving is not a pediatric dose.

**Optional B complex:** Spectrum B Complex + Benfotiamine only when additional B vitamins are appropriate. Check total B6 and niacin across all supplements.

**Optional minerals, ages 14 and over only:** Trace Minerals is not included for children under 14. For eligible teens, only after the clinician has reviewed dietary intake and all other mineral supplements.

**Optional evening powder:** Magnesium Night can fit an evening plan when both the magnesium and its botanicals are suitable; the plain magnesium option is on page 8.

The products on this page are a menu, not a requirement. Capsule swallowing ability does not determine nutritional need. Choose the core formula first; add only products with a clear purpose. Capsule opening needs product-specific confirmation (page 7).

## Write the individualised plan

MITOboost capsules, dose + schedule

Magnesium product + daily amount

Selected additions, if any

Started on

Review date

[MITOboost Capsules →](#)

[Spectrum B Complex →](#)

[Trace Minerals, 14+ →](#)

[Magnesium Night →](#)

# The Energy Support sequence

One route, one magnesium, additions only for a reason. Children: every amount is set by the practitioner.

- 1 Week 1: the MITOboost route your practitioner chose, with food.** Drink route: the day's amount split after meals. Capsule route: the adult serving is four capsules; a child's amount is set individually.
- 2 Week 2: the one magnesium,** built up to the agreed amount over the week. Magnesium L-Threonate+, or Magnesium Night when its bedtime botanicals suit the child. Never both.
- 3 Later, capsule route only, a week apart:** Spectrum B Complex, then Trace Minerals (ages 14 and over), each for an identified need. Never beside the drink, which already carries B vitamins and minerals.
- 4 Judge at 8 to 12 weeks:** stamina, recovery after activity, sleep, appetite and bowel comfort, written down week by week. Stop for loose stools, a rash or anything unexpected.

**Urgent care, not supplements:** a sudden loss of skills, severe new weakness, breathing difficulty, difficulty waking, a first or prolonged seizure, or persistent vomiting with an inability to keep fluids down.

**On the site:** the protocol page with every dose and caution, [asdhelpparent.com/pages/protocols/energy-support](https://asdhelpparent.com/pages/protocols/energy-support). The evidence, study by study: [asdhelpparent.com/blogs/research/mitochondria-and-autism-what-the-studies-show](https://asdhelpparent.com/blogs/research/mitochondria-and-autism-what-the-studies-show). Protocol pricing: 10% off automatically when two or more protocol items are in the cart; every item stays available on its own.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease. This guide describes ingredients and label directions; it is not medical advice. A child's amounts are set by the child's healthcare professional. The combinations in this guide have not been tested in clinical trials as treatments for autism or mitochondrial disease.

Labels checked October 2026. Product photography: [asdhelpparent.com](https://asdhelpparent.com). Illustration: ASDhelp. © 2026 ASDHelp Supplements, 555 Anton Boulevard, Costa Mesa, CA 92626.