

Probiotic & Prebiotic Foods Chart

Which beneficial bacteria your child needs, which foods deliver them, and age-appropriate servings

The gut microbiome directly influences brain development through the gut-brain axis — affecting mood, behavior, focus, and even IQ. Probiotics introduce beneficial bacteria. Prebiotics feed the bacteria already there. You need both. Think of it as planting the garden (probiotics) and fertilizing it (prebiotics).

Key Probiotic Strains & What They Do

STRAIN	KEY BENEFITS	FOUND IN	RESEARCH-BACKED FOR
Lactobacillus rhamnosus GG	Immune regulation, reduces eczema, prevents antibiotic-associated diarrhea	Culturelle supplements; some yogurts	Best-studied pediatric probiotic. Reduces eczema risk by 50% when given in infancy.
Bifidobacterium infantis	Digests HMOs from breastmilk, reduces inflammation, trains immune system	Evivo supplement (for infants); naturally in breastfed infant gut	The dominant species in a healthy breastfed infant gut. Declining in Western babies.
Lactobacillus reuteri	Reduces colic, improves gut motility, anti-inflammatory	BioGaia drops; some yogurts; sourdough	Reduces infant crying time by 50% in colicky babies (multiple RCTs).
Bifidobacterium longum	Stress reduction, anxiety modulation, immune support	Fermented foods; supplements	Reduces cortisol and self-reported anxiety in human trials.
Saccharomyces boulardii	Prevents and treats diarrhea, restores gut after antibiotics	Florastor supplement	Yeast-based probiotic. Does not colonize permanently. Best for acute gut issues.
Lactobacillus plantarum	Strengthens gut barrier, reduces intestinal permeability ("leaky gut")	Sauerkraut, kimchi, pickles (naturally fermented)	Improves gut barrier function in human studies.

Probiotic-Rich Foods by Age

FOOD	AGE TO START	SERVING SIZE	STRAINS PRESENT	TIPS
Full-fat yogurt (plain)	6–8 months	2–4 Tbsp (baby); 1/2 cup (toddler)	<i>L. bulgaricus</i> , <i>S. thermophilus</i> , varies by brand	Choose plain — flavored has 12–18g added sugar. Add your own fruit.
Kefir	8–10 months	2–4 oz (baby); 4–8 oz (toddler+)	12–25+ strains including <i>L. kefiri</i>	More diverse strains than yogurt. Tart — mix with fruit or smoothie.
Sauerkraut (raw, unpasteurized)	12+ months	1 tsp–1 Tbsp	<i>L. plantarum</i> , <i>L. brevis</i> , <i>Leuconostoc</i>	Must say "raw" or "unpasteurized." Refrigerated section only. Heated = dead bacteria.
Miso paste	10–12 months	1/4–1/2 tsp in warm (not boiling) broth	<i>A. oryzae</i> , <i>Lactobacillus</i> spp.	Add after cooking — boiling kills live cultures. Good umami flavor for babies.
Naturally fermented pickles	12+ months	1–2 small pickles	<i>L. plantarum</i> , <i>L. brevis</i>	Must be from the refrigerated section, made with salt brine (not vinegar).
Aged cheese (cheddar, gouda, parmesan)	8–10 months (grated)	1/2–1 oz	Various <i>Lactobacillus</i> , <i>Propionibacterium</i>	Raw milk cheese has more diverse microbes. Pasteurized is fine too.
Kimchi (mild)	2+ years	1 tsp–1 Tbsp	<i>L. kimchii</i> , <i>L. plantarum</i> , <i>Weissella</i>	Spicy — start with mild varieties. Extraordinarily diverse probiotic profile.

Prebiotic Foods (Feeds the Good Bacteria)

FOOD	PREBIOTIC FIBER TYPE	SERVES (TODDLER / OLDER CHILD)	BACTERIA IT FEEDS
Banana (slightly green)	Resistant starch, FOS	1/2 banana / 1 banana	<i>Bifidobacterium</i> — increases bifido populations within 48

FOOD	PREBIOTIC FIBER TYPE	SERVES (TODDLER / OLDER CHILD)	BACTERIA IT FEEDS
			hours
Oats	Beta-glucan	1/4 cup dry / 1/2 cup dry	Lactobacillus, Bifidobacterium — also improves short-chain fatty acid production
Garlic	Inulin, FOS	1/4 clove minced / 1/2-1 clove	Bifidobacterium — one of the richest prebiotic foods per gram
Onion (cooked)	Inulin, FOS	1-2 Tbsp / 1/4 cup	Bifidobacterium, Lactobacillus — cooking makes it gentler on digestion
Asparagus	Inulin	2-3 spears / 4-6 spears	Bifidobacterium — best eaten lightly steamed, not overcooked
Jerusalem artichoke (sunchoke)	Inulin (richest source)	1-2 Tbsp / 1/4 cup	Strong bifidogenic effect — introduce slowly (can cause gas)
Apples (with skin)	Pectin	1/4 apple / 1 apple	Bifidobacterium, Faecalibacterium — pectin also supports gut barrier integrity
Beans and lentils	Resistant starch, GOS	2-3 Tbsp / 1/2 cup	Diverse microbiome support — the single best food group for microbiome diversity
Flaxseed (ground)	Mucilage, lignans	1/2 tsp / 1 tsp-1 Tbsp	Lactobacillus, anti-inflammatory lignans converted by gut bacteria
Sweet potato	Resistant starch (especially when cooled)	2-3 Tbsp / 1/2 cup	Butyrate-producing bacteria — cook, cool, reheat for maximum resistant starch

THE SYNBIOTIC COMBO

Combine probiotics and prebiotics in the same meal for maximum effect. Examples: yogurt + banana, kefir + oats + berries, miso soup + sweet potato, sauerkraut on a bean quesadilla. When you pair a probiotic food with a prebiotic food, the beneficial bacteria get an immediate food supply.

IMPORTANT

Start fermented foods slowly — 1 tsp at a time. Some children experience temporary gas or loose stools as the microbiome adjusts. This usually resolves within a few days. If symptoms

persist beyond a week, reduce quantity and try again in a month.

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