

MAKING OUR CHILDREN **WELL**

The Insects Hiding in Your Child's Food

E120 and E904 are just the tip of the exoskeleton and the industry is betting your kids will eat the whole bug next.



A COMPANION SUPPLEMENT TO
Making Our Children Well

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What's Making Our Children Sick?

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For the past 25 years I've been fighting for disclosure. Your right to know what is in your food. Choice. Risk vs. benefits. And yet, the fight continues daily to inform you so that you can protect your children. This image inspired this article today.

The Image That Started It

You've probably seen this warning circulating: **"All foods that have these two symbols in their ingredients E120 and E904 contain insects."**

WARNING

**All foods that have these two symbols in their ingredients
E120 and E904 contain insects.**



DavidAvocadoWolfe

It's true. And it's worse than you think. I went down the rabbit hole...

E120 (carmine/cochineal) is made by crushing roughly **70,000 female cochineal insects** (*Dactylopius coccus*) to produce just one kilogram of red dye. It colors your child's strawberry yogurt, red candies, fruit juices, sausages, and even some jams.

E904 (shellac) is a resin secreted by the **lac bug** (*Kerria lacca*), scraped off tree branches and melted into a glossy coating. It shines your child's chocolate candies, coats their chewing gum, waxes the apples in the produce aisle, and even coats pharmaceutical tablets and vitamin supplements.

The image is correct. But here's what's missing from the picture: **these ingredients are hidden behind anonymous codes by design.**

The Labeling Problem: Anonymity by Design

The EU regulation defining E120 literally states it's obtained from "the dried bodies of the female insect *Dactylopius coccus*." It even acknowledges that "...proteinaceous material derived from the source insect" may be present in commercial products. Yet the ingredient list just says "**E120**."

No parent reads "E120" and thinks "crushed insects." That's the point.

The food industry knows exactly what's in your child's food. They just don't have to tell you in words you'd understand. "**E120**" is a code designed to obscure, not to inform.

The same applies to shellac. Look for these aliases on labels:

- **Carmine, cochineal, cochineal extract, natural red 4** (E120)
- **Confectioner's glaze, resinous glaze, shellac** (E904)
- **Beeswax** (E901, which is also insect-derived, often overlooked)

Why This Matters Most for Children

This is where the story gets urgent. Children are the *primary consumers* of the products where these additives are most concentrated (candy, fruit yogurts, juice drinks, and coated snacks). And their developing immune systems are uniquely vulnerable.

The Allergy Problem Is Documented, Not Theoretical

Research on cochineal dye allergy has documented **anaphylaxis** (the most severe allergic reaction) from ingestion of foods and drinks containing carmine. The EU was forced to mandate label declarations for potential allergic reactions back in 2000, and the FDA updated labeling rules in 2011 after severe cases were reported. In Japan, the Consumer Affairs Agency issued warnings after multiple anaphylaxis cases.

Here's the crucial part for parents: **the allergic reactions are caused by insect-derived contaminating proteins, not the dye itself.** A 38-kDa protein from the cochineal insect is thought to be the primary allergen.

And there's documented **cross-reactivity** with:

- House dust mites (Dermatophagoides species)
- Storage mites
- Crustaceans (shellfish)

Children allergic to dust mites or shellfish (which is a huge problem) may react to carmine-containing foods. The Finnish study on carmine allergy found that approximately **25% of carmine-sensitive patients** had no dust mite or storage mite reactions, meaning they developed primary carmine sensitization.

The "Natural" Marketing Trap

Carmine is marketed as "natural red 4" or "cochineal extract." Sounds clean, right? But "natural" just means it came from a living thing. It doesn't mean safe, hypoallergenic, or appropriate for kids. **The word "natural" is a marketing term, not a safety claim.**

The Bigger Story: Whole Insect Protein Is Coming for Kids

The E120/E904 issue is the *old* insect in food. The *new* one is far more concerning.

Cricket flour, mealworm, and black soldier fly are being actively pushed into protein bars, pasta, baked goods, and snacks. The framing is "sustainable protein" and "climate-friendly;" a Madison Avenue-derived design to make parents feel virtuous about feeding their kids bugs.

But here's the regulatory reality:

- **The FDA has not authorized cricket flour as a Generally Recognized as Safe (GRAS) ingredient for infant formula.** As of 2026, there are no **FDA-compliant commercial products** using cricket protein for infants or toddlers in the US market.
- **The safety data was developed for healthy adults, not for the pediatric population.** The safety profile for young children—whose immune systems, digestive systems, and allergenic sensitivities differ from adults—has not been established through published research.
- **The shellfish cross-reactivity risk is particularly concerning in infant and toddlers.** Shellfish allergy is among the most common and severe food allergies. Introducing cricket protein to infants and toddlers without specific clinical safety data is difficult to justify.

Even the EFSA which approved house crickets as a novel food in the EU acknowledged that consumption “might trigger primary sensitisation to *A. domesticus* proteins” and “may cause allergic reactions in subjects allergic to crustaceans, mites and molluscs.”

The EFSA even noted that the **true protein content is overestimated** when using the standard nitrogen-to-protein conversion factor because of chitin. In other words, the protein counts on insect flour labels are inflated.

How Parents Can Actually Avoid This

The Codes to Scan For

- E120 (carmine, cochineal, natural red 4)
- E904 (shellac, confectioner's glaze, resinous glaze)
- E901 (beeswax; often overlooked)

The Aliases to Recognize

- “Carmine” or “cochineal extract” in ingredients
- “Confectioner's glaze” on candy
- “Resinous glaze” on fruit or supplements

The Rules That Work

1. **Check the coating, not just the ingredients.** Shellac is on the surface of candies and fruit and may not appear in the “ingredients” line on some labels if it's considered a processing aid.

2. **Beware “natural flavors” and “natural colors.”** These vague umbrella terms can hide insect derivatives.
3. **Buy whole foods.** The fewer ingredients, the fewer places for insects to hide.
4. **For pharmaceuticals and supplements:** ask the pharmacist or manufacturer about coatings. Many vitamins and liquid meds use shellac.

The Frame

The food industry knows exactly what’s in your child’s candy. They just don’t have to tell you in words you’d understand. **“E120” is a code designed to obscure, not to inform.** And the next wave (think cricket flour in toddler snacks) is being sold to you as sustainability, not as what it is: feeding your children bugs with no long-term safety data.

References

1. **European Commission Regulation (EU) 2018/1472:** Official definition of E120: “Carminic acid is obtained from aqueous, aqueous alcoholic or alcoholic extracts from Cochineal, which consists of the dried bodies of the female insect *Dactylopius coccus* Costa.” Also acknowledges “proteinaceous material derived from the source insect” may be present.
2. **Yamakawa Y, et al. “Cochineal dye-induced immediate allergy: Review of Japanese cases and proposed new diagnostic chart.”** *Allergology International* (2018): Documented anaphylaxis cases from cochineal dye, identified the 38-kDa protein as the primary allergen, and noted cross-reactivity with dust mites and crustaceans.
3. **Liippo J, Lammintausta K. “Allergy to carmine red (E120) is not dependent on concurrent mite allergy.”** *International Archives of Allergy and Immunology* (2009): Documented that ~25% of carmine-sensitive patients have primary sensitization without mite allergy.
4. **EFSA Panel on Nutrition, Novel Foods and Food Allergens. “Safety of frozen, dried and powder forms of house crickets (*Acheta domesticus*) as a novel food.”** *EFSA Journal* (2024): Acknowledged primary sensitization risk and cross-reactivity with crustaceans, mites, and mollusks. Noted protein content overestimation due to chitin.
5. **Boit TC, et al. “Should we provide edible insects in children’s diets?”** *Current Opinion in Clinical Nutrition and Metabolic Care* (2024): Confirmed that clinical trials on insect protein in children are lacking, and that “...well-designed clinical trials are needed” for safety and allergenicity.
6. **CricketOps Regulatory Analysis (2025)** — As of 2026, FDA has not authorized cricket flour as GRAS for infant formula, and no FDA-compliant commercial products

use cricket protein for infants or toddlers in the US market. Safety data has been developed for healthy adults, not the pediatric population.

Closing Thought

The image I shared is a wake-up call. But the real story is bigger: **the food industry has built an entire vocabulary designed to keep you from knowing what's in your child's food.** E-numbers are the perfect example of codes that obscure insect origins, hide behind "natural" marketing, and shift the burden of detection entirely onto parents.

The industry is now betting that parents will accept whole insects (cricket flour and mealworm protein) in their children's food, sold under the banner of "sustainability" instead of giving it to their chickens. The safety data for children doesn't exist. The allergy risks are documented. And the labels won't tell you the truth.

Read the labels. Know the codes.

And ask yourself: **why is the industry hiding the insects behind numbers?**



*Download the [Insect Check](#) app and analyze your product's listed ingredients!

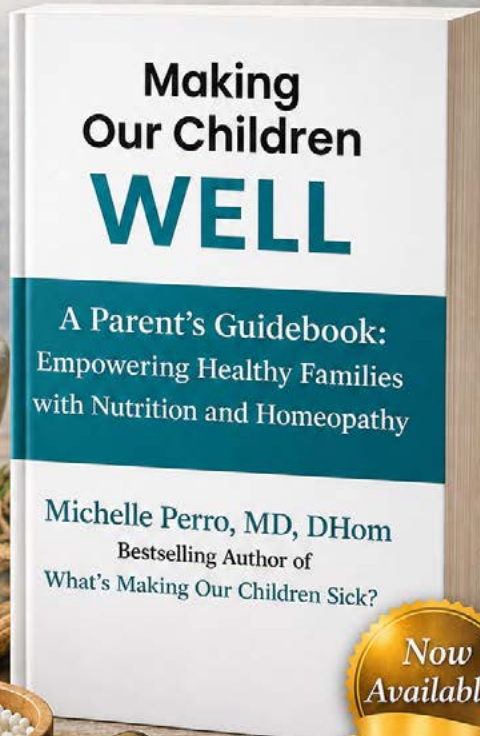
Note: This topic is offered as a free bonus section for my new book at makingourchildrenwell.com.

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