

## From dirt to the dinner table: Tracking how foods make the journey across a massive globally-connected food system

I'm a naturally curious person, but sometimes life (*read: kids*) takes me off course. But recently, I seized the opportunity for a quiet weekend...and it was glorious. After a hike on an unseasonably warm February morning, I sat down to think about what to explore for my next D2D post. I grabbed a go-to snack of mine – a peanut butter & chocolate RxBAR – and tore off the wrapper.

But this time, instead of tossing the wrapper to begin chewing at that dense, doughy square, I gingerly pieced the wrapper back together. And there was my lightbulb: the ingredients so clearly and cleverly listed on the front of the package. Where are these ingredients from? How is this product made? And how does it get to my grocery store?

So begins my trek on where some of our favorite foods come from. *Bon voyage!*

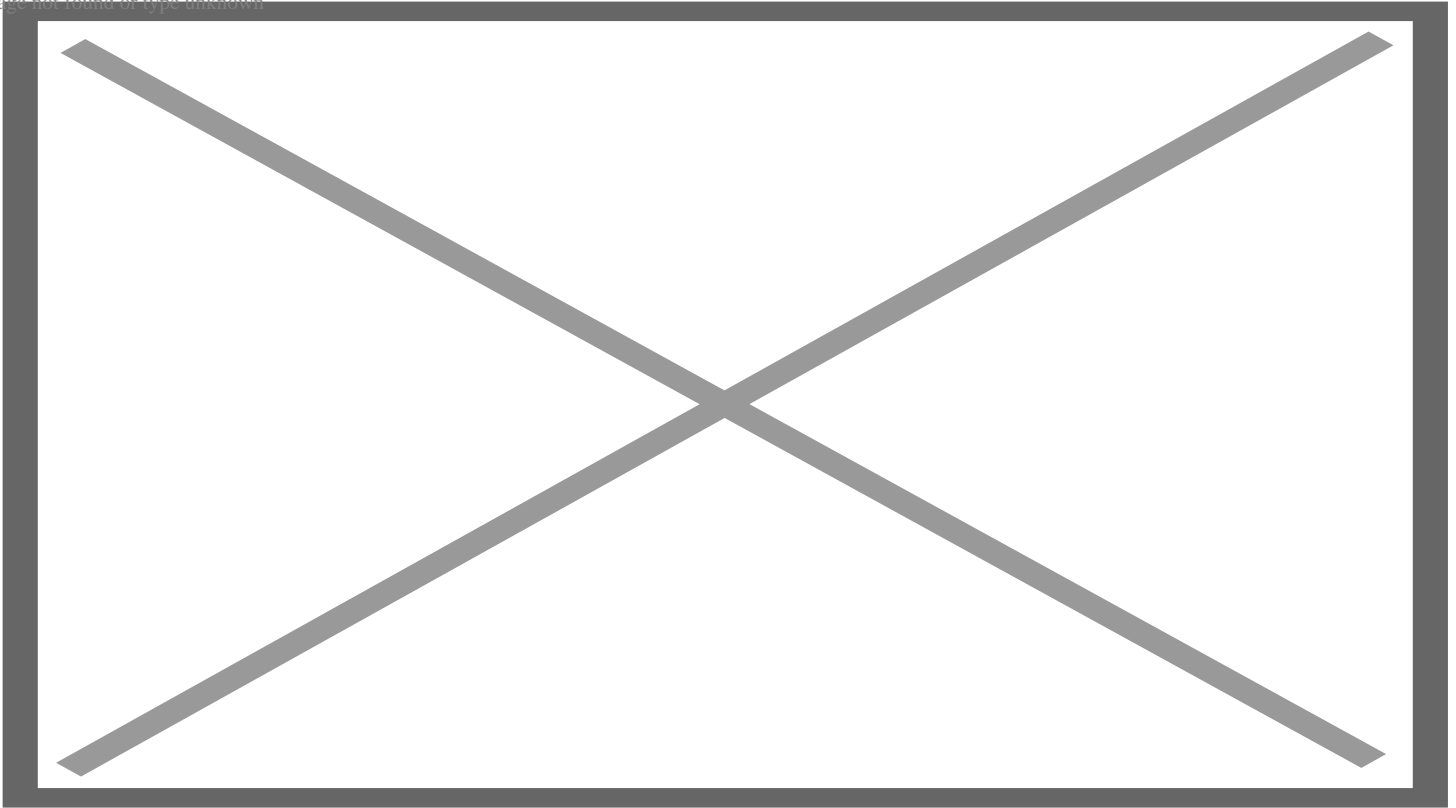
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### **RxBAR Protein Bar: Simple ingredients, complex sourcing**

So here's this beige, homogenized-looking bar, but its four ingredients are anything but. Each of these listed foods – dates, peanuts, egg whites, and chocolate – has a source. And from its source begins a journey to us, often with a few stops along the way.

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For instance, the main ingredient in this protein bar is dates, which are commonly cultivated and packaged in the Middle East. The Middle East. Not some fabricated, gooey by-product made within RxBAR's manufacturing facility. And because fresh dates are perishable, they must be cleaned and packaged close by and shipped directly to the U.S. facility for processing. I'm already feeling more globally connected.

Next up are peanuts, [grown and shelled in the southeastern U.S.](#), followed by egg whites. Despite egg whites' domestic roots, they have an interesting story to tell. Some food manufacturers, like RxBAR, have just a few product lines – none of which require the *whole* egg. All they need to make their products is egg white *powder* – a significantly cheaper, lighter, and less fragile product *derived* from whole eggs.

Separating and dehydrating [eggs](#) into discrete products occurs at an [egg processing plant](#). The egg product then ships to the manufacturing facility for reconstitution and is added as an ingredient in its protein bar formula. If I were that humble egg white in that little egg at the beginning of this process, you better hope I had no idea of that long path ahead.



The last main ingredient, [chocolate](#), requires us to go abroad

once again – to the Ivory Coast. There, the cacao beans are picked, fermented, dried, [packaged and exported](#) to a U.S. processing facility for roasting and grinding before being sent to the manufacturing facility.

With all ingredients intact, the manufacturer also adds salt and other additives not listed on the wrapper to preserve freshness, modify color, and/or enhance flavor. In the case of RxBAR, the end product goes into a high-barrier film wrapper to withstand the next leg of its journey.

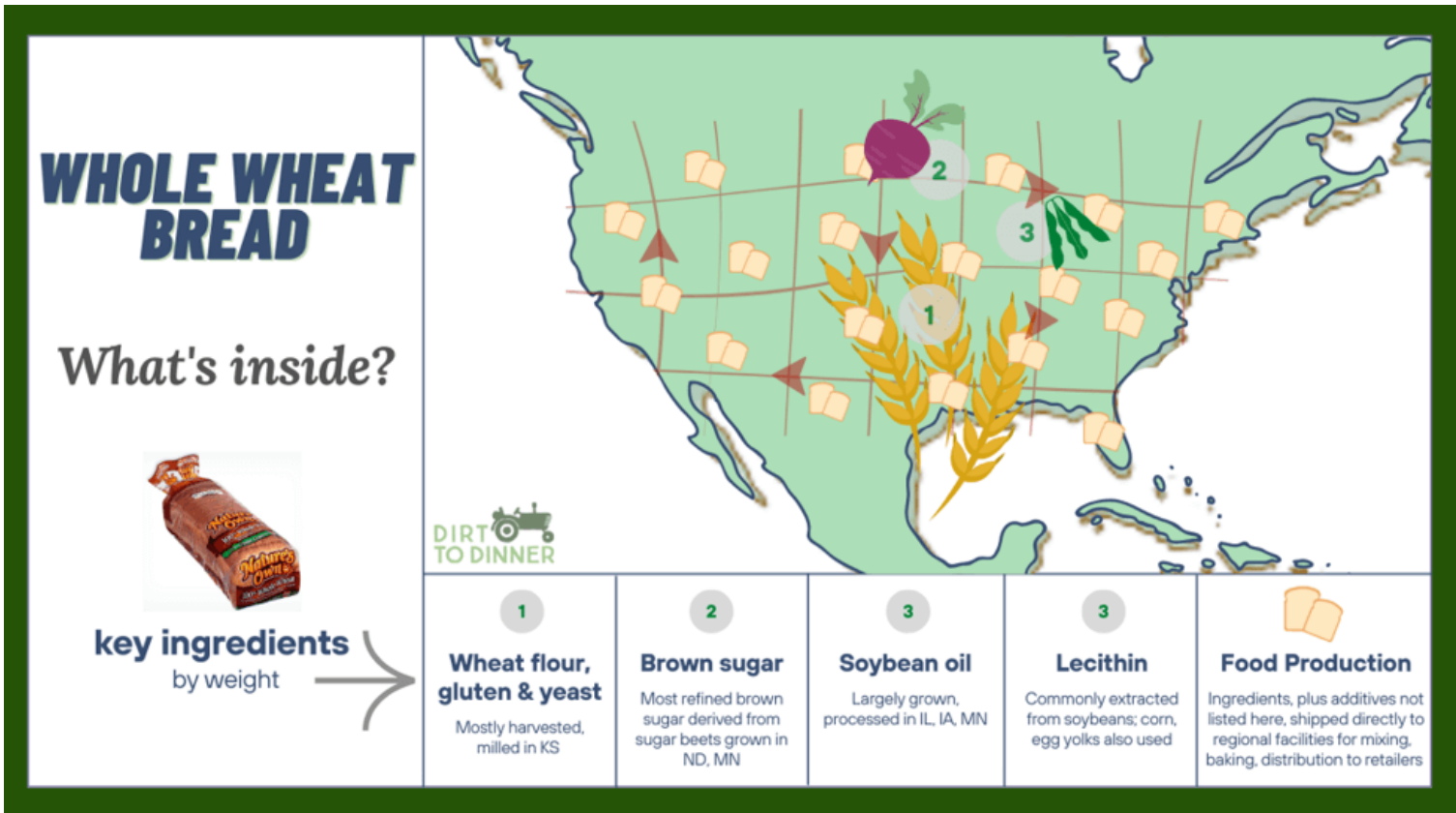
Because RxBAR is owned by Kellogg's, it can utilize the parent company's existing distribution network to get its product to grocery stores and other retailers across 15 countries. It's incredible where this one simple bar has been, right?

## **Whole wheat bread: a lesson in distribution networks**

My curiosity hasn't even begun to be sated, though. Next? Let's pick something domestically produced and seemingly straight-forward. How about the U.S.'s most popular wheat bread, Nature's Own?

The Midwest U.S. is known for its production and global distribution of [wheat](#) and its derived products, like flour, wheat germ, [gluten](#), yeast, starch, among others. So it's no surprise that the wheat products in Nature's Own 100% whole wheat bread are mostly grown in North Dakota, Kansas, and Colorado and then shipped and processed to at least 20 different states within the country.

Next up by weight is brown sugar. This is typically a mix of refined white sugar and molasses and probably sourced from sugar beets grown in North Dakota and Minnesota. Soybeans, grown and processed in the Midwest, create the next two ingredients via separate processing lines: soybean oil and lecithin.



What I found most interesting about this food product is not necessarily the ingredients, but [the journey they take](#). Because Flowers Foods owns Nature's Own as well as Wonder Bread, Dave's Killer Bread, and Tastykake, the company utilizes its network of bakeries across the U.S. to manufacture these products.

*And these bakeries don't receive just a big bag of combined ingredients; they receive the flour, yeast, soy products, and all else separately from each processing facility, creating a vast and interconnected intermodal grid across the country.*

If you think switching subway lines is hard, try adding in buses, taxis, rail trains, and bikes all while picking up and delivering Doordash orders within the one-hour limit. Yep, not easy at all. Enter an established nationwide distribution network comprised of [rails](#) and [roads](#) to make life easier and products fresher.

## Cashew milk: Have a little help from...a global conglomerate

When visiting the grocery store, are you as overwhelmed as I am at the dairy aisle? As if there isn't enough competition among [traditional milks](#) – organic, conventional, regional, skim, whole – we must mine through the [plant-based options](#), too. And manufacturing these alternative milks are way more complicated than its traditional, sole-ingredient counterpart.



Why? Turn that carton around and take a look at that ingredient list. Surprisingly extensive, right? For this supermarket trip, I'm going to give Silk vanilla cashew milk a shot. For brevity (not to mention my sanity), I'm looking into its top five ingredients. Here we go...

Cashews. Delicious, creamy...and definitely *not* from around these parts. Cashew trees need constant heat and sunlight to grow, which is why they are mostly cultivated in India; Africa and Vietnam are also significant exporters to U.S. Next up by ingredient weight are almonds, which are domestically produced. In fact, [80% of the global supply comes from California alone](#).

Nuts comprise the bulk of the product, with a lengthy series of [additives](#) making up the balance. Many of these are produced, manufactured, and exported to U.S. processing facilities. These ingredients include locust bean gum sourced from carob trees along the Mediterranean; sunflower lecithin, formerly from [Ukraine](#) and [Russia](#), but now most likely from Argentina and Romania; and vanilla from Madagascar. Vitamins are also mixed in to deliver a fortified product that can more readily compete with traditional milk's nutrient density.

All these moving parts make me wonder: how can a company source so many global ingredients to supermarkets worldwide before the product expires? Simple...just get purchased by Danone, a massive international food company with reaches into the furthest parts of the world.

*And having exotic ingredients at your disposal is just one benefit. How about that expansive lineup of*

*Danone's manufacturing facilities and distribution systems?*

*That way, Silk can utilize regional facilities to process its ingredients and package its products in a timely manner into the beverages we see today.*

Otherwise, a company may be stuck with just a couple U.S. facilities and then be forced to orchestrate its own distribution system in hopes that its products arrive on time...and not expired.

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## **Coffee: A unique 'blend' of hemispheres**

Ah, coffee. This is probably nearest and dearest to my heart on this list. And not just because it brings joy to me each and every morning, but also because each heavenly sip truly [connects the Southern Hemisphere with the Northern Hemisphere](#). Every. Single. Granule.

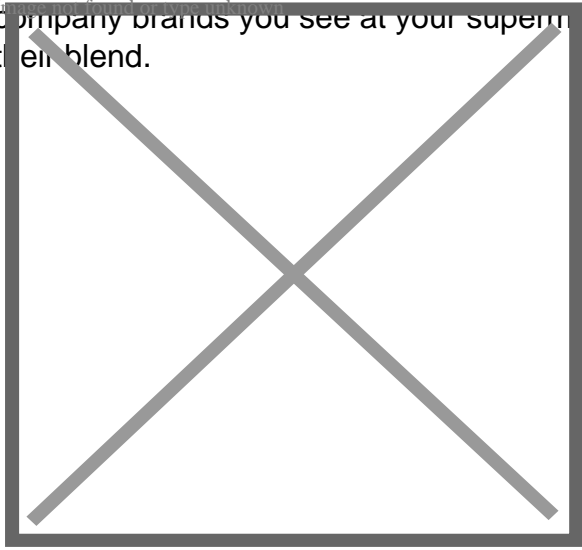
You see, you think coffee would be super simple to envision its journey because it's just one ingredient, but it couldn't be farther from the truth.

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Let's take Folgers, one of America's favorite coffee brands, for a ride. Similar to many other large coffee

For company brands you see at your supermarket, Folgers uses a mix of robusta and arabica coffee beans in their blend.



Robusta beans provide that caffeine rush but at the cost of a

more grainy, harsh taste. Arabica, on the other hand, is smoother, has more depth of flavor, and is harder to cultivate. Specialty coffees are usually 100% arabica, which is one reason why you'll see them at a higher price point.

To keep its prices down, Folgers is reported to blend their coffees with *60% robusta and 40% arabica beans* from all across the "coffee belt", the equatorial line where coffee grows in abundance. And when I write "blend", I mean it.

You know how you'll see labels showing where the beans are from, like "100% Colombian", "[Ugandan](#)", or "South American blend"? You won't find such a level of specificity with Folgers Classic Roast. Why? Because they collect the mix of beans from across the coffee belt, roast and grind them in their New Orleans facility, and then package and distribute across the U.S. and Asia via its parent company, Procter & Gamble. Seriously, a global connection in every ground.

## Value & connection in our food

Now I can't help but look at ingredient labels; not just for nutritional and health reasons, but for exploration and continued curiosity. Even with seemingly no end to inflation in sight, it puts prices for these goods in a different perspective. Yes, I need to be more mindful of my wallet when going to the grocery store nowadays, but the value is undeniable.

*For around \$3, I get a high-protein snack with quality ingredients all the way from the Middle East; and I get to enjoy a mugful of deliciousness every morning that connects me to local farmers the world over...all at just 5c a cup.*



*It's amazing how these products seem to arrive right in front of us, even though they're sourced from places most of us have never been.*

And although globalization feels less prevalent over the last few years because of Covid, the war in Ukraine, logistical snafus like the [Ever Given canal blockage](#), just to name a few, we depend on one another. It's a complicated, interwoven relationship with nations across the globe where one small snag weakens the fabric of interconnected networks. And as the war continues and other global situations arise that disrupt our food system, there's still no denying these key partnerships provide the choices, convenience and prices we've all become accustomed to.

So with that, take heart that these suddenly complicated global food products, like cashew milk and white chocolate macadamia nut cookies, will continue to fill our store shelves.

## **The bottom line**

It's so easy to fall into the normal "grab & go" patterns while food shopping and preparing meals. So when you have a moment, take a look at the ingredients list on the packaging and let your curiosity, and your google searches, run wild. You might be surprised by what you discover. And perhaps part with a deeper appreciation for our complex food system.

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