

Natural Banana - Ingredients



INGREDIENTS: WATER (75%), **SUGARS (12%)** (GLUCOSE (48%), FRUCTOSE (40%), SUCROSE (2%), MALTOSE (<1%)), STARCH (5%), **FIBRE (3%)** (E460, E461, E462, E464, E466, E467) **AMINO ACIDS** (GLUTAMIC ACID (19%), ASPARTIC ACID (16%), HISTIDINE (11%), LEUCINE (7%), LYSINE (5%), PHENYLALANINE (4%), ARGININE (4%), VALINE (4%), ALANINE (4%), SERINE (4%), GLYCINE (3%), THREONINE (3%), ISOLEUCINE (3%), PROLINE (3%), TRYPTOPHAN (1%), CYSTINE (1%), TYROSINE (1%), METHIONINE (1%)), **FATTY ACIDS (1%)** (PALMITIC ACID (30%), OMEGA-6 FATTY ACID: LINOLEIC ACID (14%), OMEGA-3 FATTY ACID: LINOLENIC ACID (8%), OLEIC ACID (7%), PALMITOLEIC ACID (3%), STEARIC ACID (2%), LAURIC ACID (1%), MYRISTIC ACID (1%), CAPRIC ACID (<1%)), ASH (<1%), PHYTOSTEROLS, E515, OXALIC ACID, E300, E306 (TOCOPHEROL), PHYLLUQUINONE, THIAMIN, **COLOURS** (YELLOW-ORANGE E101 (RIBOFLAVIN), YELLOW-BROWN E160a), **FLAVOURS** (ETHYL HEXANOATE, ETHYL BUTANOATE, 3-METHYLBUT-1-YL ETHANOATE, PENTYL ACETATE), E1510, NATURAL RIPENING AGENT (ETHENE GAS).

A recent Cornell University in the US study examines the origins of food fears, and possible remedies. It's a survey of 1,008 mothers asking about foods they avoid and why. Food fears and aversion are quite common and presently often exaggerated by social media. Humans have an inherent emotion of disgust, which is likely to have been an adaptation to help avoid contaminated or spoiled food. In our modern society this reflex can be tricky, because we do not always have control over the chain of events that leads to food on our plates. Other people grow the food, transport it, process it, and perhaps even cook it. Modern food technology can also involve many scary sounding substances and unusual processes. As the saying goes, you may not want to know how the sausage is made, as long as the end result makes a good breakfast.

This leads to a second reason for modern food fears ? we are living in an age of increasing transparency, partly brought about by the dramatic increase in access to information on the internet. Ultimately this is a good thing ? people are seeing how the sausage is made, which makes it more difficult to hide shady practices. This introduces a new problem, however. If you're going to inspect the process of making sausage, then you need to know something about sausage-making. In other words ? people are obtaining a great deal of information about food, food ingredients, and manufacturing processes, which is a good thing. However, much of this information is coming from dubious sources ? non-professional or academic sources that have not been peer reviewed in any meaningful way and may have ulterior agendas, ideological biases or mischief and/or malice to peddle.

Further, it is not easy to understand any complex science, including chemistry and food science, which includes medical studies on ingredient safety. Some diet companies have essentially made a career out of provoking irrational fear of ingredients with unsavoury sources and with scary-sounding, long chemical names. Neither of these factors have anything to do with actual food safety, but they make it easy to scare the non-expert. Specifically this includes so-called 'chemophobia' which is the fear of chemicals. The problem with this provoked chemophobic approach is that everything is chemicals. As the banana graphic above demonstrates, the formal chemical names even for everyday food molecules are long and unfamiliar to non-chemists. The end result is that many people use short-cuts or heuristics to determine what food they trust and what food to avoid. One heuristic is the 'natural' false dichotomy - if something seems natural it is healthful, and if it seems synthetic it should be avoided. This heuristic rapidly breaks down on two main counts. The first is that there is no good operational definition of 'natural.' All food is altered by humans or processed in some way. Where do you draw the line? The second is that something occurring in nature is no guarantee of safety. Many things in nature will harm or even kill you given half a chance. Many plants and animals have evolved toxins specifically to harm anything that tries to eat it. Yet another heuristic is to avoid anything about which anyone expresses fear or concern. This tactic is to essentially err on the side of caution in response to any expression of risk regarding a food. This strategy obviously occurs along a spectrum, but even a moderate degree of the precautionary principle can put a great deal of power in the hands of internet fearmongers. The fearmongering heuristic is also related to another one, which is to separate foods into 'good' foods and 'bad' foods. Bad foods are to be avoided all the time, in any amounts. This derives partly for a desire for simplicity and control - boiling all the complexity of diet and nutrition down to a simple list of naughty and nice. The reality is that the health effects of eating most food are all about proportions. Most things are fine in moderation.

Let's get back to the recent survey - they found that food fears were associated with wanting others to know about your food choices and deriving food information from the internet rather than TV or other sources. One might conclude from this that the internet drives food fears, which would seem to be a reasonable conclusion. However, there are too many potential confounding factors to make any statements about cause and effect. The survey also found that mothers with food fears were not more willing to pay more for food without the scary ingredient than mothers with less food fears. This again is difficult to interpret. One potentially encouraging result of the survey is that the effects of food fears were mitigated by providing information about the food. This would suggest that attempts to educate the public about the real nature and scientific

evidence regarding a demonized food could reduce irrational fears. The limitation of the survey was that the results were only assessed immediately, so it's difficult to tell if there was any real long-term effect.

So in conclusion

Irrational and faddish food fears now seem to be part of the culture, worsened by the immense flow of information over the internet, most of which is unvetted. This results in some people avoiding perfectly harmless ingredients based on unfounded fearmongering. As we have seen, this can also lead to pressure being placed on food manufacturers to eliminate the harmless ingredients (and their benefits) just to avoid the effects of a fearmongering campaign. Furthermore, irrational fearmongering about food provides unintentional cover for ingredients that should be limited or avoided. This results from two factors. The first is simply burying the useful information under piles of misinformation. The second is replacing a science-based assessment of reliable information about the real risks vs benefits of food ingredients.

Internet food warriors are promoting an unscientific approach to food safety, based upon the naturalistic fallacy, chemophobia, the demonization of foods, retailers, manufacturers and ingredients, and a misapplication of the precautionary principle.

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