

## Taboo Food Combinations (Part 1)

In 1850, Zachary Taylor, the 12<sup>th</sup> President of the United States, [died in office](#) after consuming cherries and milk. Since then, the taboo combination of cherries and milk has been passed on through generations, and is probably the most well-known food combination to avoid in western culture. When a Chinese person learns of this, their typical response is:

“Bitches, please.”

The Chinese take their food combinations seriously. The [first list](#) I found online yielded 211 taboo food combinations. There are [websites](#) dedicated entirely to this topic, listing well known combinations from crab and persimmon, to lesser known ones such as [dog blood and mudfish](#).

This month, we will look at a common combination, crab and persimmon, and see if it's as deadly as it's rumored to be.

### ***The claims***

A few sites claim the combination is toxic without explanation, but most sites claim that the tannins in the persimmon interact with the protein in the crab, creating an indigestible chunk, which is often confused with diospyrobezoars (persimmon stones).

There are several problems with the claims. First of all, the tannin content and type depend heavily on the type of persimmon (astringent/non-astringent) and the stage of ripeness. Furthermore, there is no evidence that the specific tannins only interact with protein from certain crustaceans, or in fact, with any consumable protein at all. Diospyrobezoars, a.k.a. persimmon stones, are nasty things. They can get as large as water bottles and [weigh up to 1kg](#), and are the result of over-ingestion of unripe or astringent persimmons. No external protein source is required, such as crab meat, and in fact it forms better on an empty stomach. And on an interesting side note, a [systematic review](#) found that for diospyrobezoars, treatment with Coca-Cola was effective in over 90% of cases.

Crabs pose their own problems when consumed. Namely, shellfish allergies (quite common and leads to anaphylaxis), and undercooking (leads to [infections](#) and [parasites](#)). Again, this does not require the presence of persimmons.

A quick search turned up many western recipes that gleefully combine persimmon and crab, such as [“Steamed Dungeness Crab with Fennel, Persimmons and Ponzu Creme Fraiche”](#), and [“Dungeness Crab Salad with Persimmon Carpaccio and Yuzu Vinaigrette”](#). None of the recipes carry the skull and crossbones sign, and nobody has been sued for reckless endangerment so far.

The final nail in the coffin comes in the form of a [controlled experiment](#) by Dr. Ge, Honorary President of the Chinese Nutrition Society. He teamed up with experts from Harbin Medical School and University of Lanzhou, had 130 volunteers consume taboo food combinations every day for one week, and closely monitored their health. He found no adverse reaction. This echoes an old [study](#) done in 1935 by Zheng Ji, which also included crabs and persimmons, and also found absolutely nothing.

### ***Are there ANY toxic food combinations?***

Most of the food we eat is, chemically speaking, quite bland. The basic building blocks such as carbohydrates, protein, sugars, and fat, may undergo changes such as curdling, but do not transform

into toxic compounds in our digestive tract, nor can they turn into different chemical elements - which would require alchemy, or more accurately, a nuclear reaction. I think we can all agree that nuclear reaction in your torso is not a good thing.

However, that does not mean that there are NO toxic food combinations. I was able to find one toxic combination [substantiated](#) by science, namely, the common ink cap mushroom ([Coprinopsis atramentaria](#)) and alcohol. The mushroom contains coprine, which inhibits an enzyme that metabolizes alcohol, resulting in an accumulation of acetaldehyde (which is what causes a hangover). So in effect, you get a huge hangover when you eat the two together. No wonder this mushroom has another name, *Tippler's Bane*. Unsurprisingly, I was not able to find this specific combination on the list.

### ***What's really going on***

So what's really going on here? The folk belief seems to be a result of pattern recognition, confirmation bias, and argument from authority/antiquity.

Humans are the masters of pattern recognition. It is an innate ability and key to understanding cause and effect. However sometimes it does go awry, leading us to see patterns from meaningless information ([apophenia/pareidolia](#)), such as a pattern in roulette, a face on Mars, or Jesus on a sandwich. When our ancestors got sick after eating crab and persimmon, they might have incorrectly attributed the illness to the combination, rather than the real cause. Since the cost of not eating the two together is rather small, there is no compelling reason to dispel the myth.



What about all the times that people did not get sick when consuming crabs and persimmon together? We forget those instances, simply because those are not salient. We not only tend to remember the hits and ignore the misses, but we also do not actively *look for* the misses. Looking for evidence contrary to our belief can prove us wrong, which can cause mental discomfort (cognitive dissonance), so we simply don't look. This is confirmation bias at work.

Finally, we tend to give ancient wisdom more credit than it may deserve, especially if it comes from an authority figure. Ancient wisdom is often helpful, but relying on it exclusively is a dangerous mental shortcut ([heuristic](#)) that can lead to ruin. Claims should stand on their own merit, and be substantiated by facts and observable data; not simply because they are old, or because some authority figure said so.

### **Conclusion**

In this case, ancient wisdom has not kept up with the times. There is no real danger in eating persimmon and crabs together, and I suspect that this applies to most if not all of the common food taboo combinations. So enjoy your cherries and milk, tofu and honey, crabs and persimmon together. And if you are adventurous enough and PETA is not around, yes, even mudfish and mutt juice.

### References:

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