



To eat or not to eat noodles - that's the question

Coffee Beans

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Recently, the American weekly magazine USA TODAY asked its readers to comment on a targeted misinformation - a meme (replicating unit of information, thought concept - similar to a biological gene), which gained thousands of shares immediately after its publication. *“This is why instant noodles do not stick when cooked. Our body needs 48 hours to cleanse itself of the wax. However, instant noodles do not contain any wax and do not cause cancer or other diseases”* [1]. From time to time, however, absurd claims are made - such as the question of the danger of instant noodles - on social media, and the absurdity of this misinformation needs to be explained again [2].

On October 2000, practically a quarter of a century ago, a hoax first appeared on the Internet in the form of a chain email warning against the consumption of instant noodles. The claim went viral in 2014, when a debate on the topic ignited on Facebook. In the first case, Snopes.com, one of the best-known and oldest portals dedicated to debunking misinformation, spoke out against the unsubstantiated claim. In the second case, the Truth or Fiction server intervened, rationally analyzing the situation and arguing with substantiated facts refuting the claim. This server, like Snopes.com, analyses various myths, hoaxes and disinformation and helps readers to distinguish between truth and fiction (in the Czech Republic, this activity is consistently carried out by Demagog.cz and Hoax.cz, which specialise in verifying politicians' claims and debunking hoaxes).

The popularity of instant noodles increased globally during the long-term isolation of the population during the COVID-19 pandemic, due to the need to adapt to anti-epidemic isolation measures and to simplify as much as possible the tasks of everyday life (pre-prepared instant meals became in high demand - thus reducing cooking requirements). At the same time, many disinformation claims have made a comeback [3]. In the Czech Republic, about 3.5 million packs of instant noodles are sold annually. Different brands of different flavours are entering our market. The most popular are noodles with chicken or beef flavour. As far as brands are concerned, both Nestlé (Switzerland) and Maruchan (Japan) instant noodles can be bought here. After the simplification of importing this product from Vietnam, products of the Vietnamese company Vifon (Vietnam) and its very popular Pho noodles, again with different flavours, can also be found on our food market [4].

However, there is no evidence that noodles contain wax or that their consumption causes cancer. Nor is there evidence that wax is used in polystyrene packaging. This misinformation has been challenged both by the noodle manufacturers (the aforementioned Maruchan Ramen Noodles or the multinational Nestlé, maker of Maggi noodles) [5-7] and by the European Commission's Directorate-General for Health and Food Safety (DG SANTE), which has relaxed controls on imports of instant noodles from Vietnam into the EU. As of 27 July 2023, food safety inspection certificates from authorised agencies in Vietnam are no longer required for their import into the EU [8-10].

So, what about wax? There are a number of waxes in use by various industries, they are esters of higher fatty acids and higher monosaturated alcohols. Waxes most often contain palmitic, lauric, myristic or stearic acids. They are naturally occurring in nature and have a number of very important biological functions (mostly protection of plant and animal surfaces against desiccation or penetration of pathogens). Waxes are resistant to hydrolysis and do not undergo enzymatic degradation, so they are not digestible by humans. They are, however, used in physiotherapy (e.g. paraffin wraps), cosmetics (plant waxes or beeswax), but also in the food industry, where they are often found as a food additive (supplement) marked with an E code, e.g. E903, which is purified carnauba wax obtained from the leaves of the Brazilian tropical palm *Copernicia cerifera*.

In the food industry, carnauba wax is used to create a glossy surface on confectionery (lollipops and jelly sweets) or to protect against drying out (for example, fruits or vegetables [11]). One could go on, beeswax is listed as E901 and is used as a polishing agent to treat the surface of fruits, vegetables, candies, chocolate) or as a protective coating for cheese [12]. The E code means that the ingredient is registered by the European Commission for healthy food.

The conclusion is therefore very simple, even if instant noodles were treated with one of the food waxes against sticking, nothing would happen to the consumers. Instant noodles are not harmful, but they should be consumed in moderation and supplemented with other foods to form a varied and balanced diet.

Sources

- [1] eu.usatoday.com - McKenzie S. Fact check: Instant noodles do not contain wax coating or cause cancer.
- [2] Wang S., et al. Occurrence, congener group profiles, and risk assessment of short – and medium- chain chlorinated paraffins in cp instant noodles from China. Chemosphere. 2021. PMID: 33894510.
- [3] Quan YH, et al. Exposure or pandemic effect: Export boom in instant noodles from South Korea during Covid-19. Food Sci Nutr., 2023, PMID: 38107138
- [4] Spotřeba potravin | Statistika
- [5] [Myth debunked: Instant noodles do not contain a wax coating nor cause cancer, Lifestyle News - AsiaOne](#)
- [6] [Maruchan - Instant Ramen Noodles, Bowls, and Cups](#)
- [7] [Maggi noodles are not coated with wax. | Nestlé](#)
- [8] [Instant noodles are relaxed when exported to the EU – Factories in Vietnam](#)
- [9] [Implementing regulation - 2023/1110 - EN - EUR-Lex](#)
- [10] [EU uvolňuje nařízení o bezpečnosti potravin pro vietnamské instantní nudle | BusinessInfo.cz](#)
- [11] <https://www.ferpotravina.cz/seznam-ecek/E903>
- [12] <https://zdravevcely.webnode.cz/vceli-produkty/vceli-vosk/vyuziti-vceliho-vosku/>