

Nutella Unmasked

Analysis by Dr. Joseph Mercola

January 09, 2024

STORY AT-A-GLANCE

- Nutella is a favorite chocolate nut spread in Europe and now has a growing fan base in the U.S., thanks to dedicated Facebook pages, Twitter accounts and even a national day to celebrate Nutella
- Advertised as a hazelnut spread with a touch of chocolate, Nutella actually contains a large dose of refined sugar and refined palm oil, both with known carcinogenic properties

Editor's Note: This article is a reprint. It was originally published March 8, 2017.

If you haven't experienced a slice of toast with Nutella, you may not be missing as much as advertisers would like you to believe. Nutella, advertised as a pseudo-healthy sweet, is a chocolate spread used on pancakes, toast and fried in wontons.

In fact, the product has a large group of enthusiasts both in Europe and the U.S.

Unfortunately, while advertised as a healthy addition to your morning breakfast routine,

Nutella doesn't live up to the hype.

The simple ingredient list contains just five items, the greatest of which is sugar. Nutella has celebrated its 50th year anniversary and appears to be well established in their niche market of spreadable chocolate. Interestingly, crimes related to the product have also made the news.

In 2013, thieves in Germany snatched a little over \$20,000 of the jars from a delivery truck. In that same year, Columbia University discovered students were taking jars of

Ingredients in Nutella May Surprise You

While customers seem to love the taste, bordering on addiction, its ingredients may surprise you. In this short advertisement from Nutella, you're told your children need the enticement of chocolate each morning to get them to eat breakfast.

But, before you pop out to the store to get a jar, take a peek at what's inside. The advertisement talks about hazelnuts and a hint of cocoa, but neglects to mention refined palm oil and a massive dose of sugar. The label claims there are 8.5 grams of sugar in a 15-gram serving.³

However, when dishing out Nutella, you likely are not weighing the product and there is no indication of a teaspoon serving size. In a statement, Nutella's parent company, Ferrero, said:

"One of Ferrero's core nutritional beliefs is that small portion sizes help people to enjoy their favorite foods in moderation. The labeling on all our products enables consumers to make informed choices and helps ensure that Nutella can be enjoyed as part of a balanced diet."

Sugar and Palm Oil Do Not Make for a Healthy Breakfast

That sounds good, but a major infusion of refined sugar is not part of a balanced diet. In fact, eating refined sugar triggers natural opioids in your brain and may be as addictive as cocaine to some people. It also increases your risk of disease, tricks your body into gaining weight and may trigger behavioral changes.

The second ingredient making the news is palm oil, which has predominantly been harvested from the forests of Malaysia and Indonesia, contributing to the deforestation of those countries and having a significantly negative impact on the environment and the animals who depend on palm trees for survival.

Ferrero has made a point of using sustainable palm oil they claim is not contributing to deforestation and is part of a broad effort to create sustainable methods of production of palm oil.^{4,5} However, sustainability is not the only concern with the palm oil used in Nutella.

Health Effects of Refined Palm Oil Called Into Question

The European Food Safety Authority (EFSA), akin to the U.S. Food and Drug Administration, recently released a study⁶ finding the chemical contaminants that result from refining vegetable oils (including palm oil), may increase your risk of cancer.

The substances causing concern included: glycidyl fatty acid esters (GE), 3-monochloropropanediol (3-MCPD), and 2-monochloropropanediol (2-MCPD) and their fatty acid esters. When refined at approximately 200 °C (392 °F), palm oil and palm fats had the highest number of contaminants, including GE.

No tolerable or safe levels have been set for GE as the group found sufficient evidence it is genotoxic and carcinogenic.⁷

The panel's review did find levels of GE between 2010 and 2015 were cut in half through voluntary measures taken by producers. Ferrero claims their palm oil, refined to take out the characteristic red color and unusual taste, is responsible for the texture and taste of Nutella.

The company states its palm oil is refined at temperatures just below 200 °C and under low pressure to reduce contaminants. Moving away from palm oil would not only change the taste, but also have economic repercussions to the company.

Cost Is a Factor in Production

Palm oil is the cheapest vegetable oil, costing \$800 per ton, compared to \$845 for sunflower and \$900 for rapeseed.8 Ferrero uses 185,000 tons each year, so switching could increase costs between \$8 to 22 million annually.

Although the World Health Organization and the U.N. Food and Agriculture Organization also flagged refined palm oil with the same risk, they did not recommend banning the ingredient. The palm oil industry, valued at \$44 billion, has found a vocal and passionate supporter in Ferrero.

Without prompting, and following the release of the study, a large supermarket chain in Europe decided to boycott processed palm oil. Barilla has also eliminated it from their products. However, Nutella, going on the offensive, began running a series of advertisements to assure the public in Italy their product is safe. 10

Unilever and Nestle have also continued to include palm oil in their products despite the report from EFSA. However, Ferrero is the only company, to date, mounting such a public defense of their use of palm oil.

Ferrero, a privately owned company, says global sales have been unaffected by the EFSA announcement and are continuing to grow approximately 5% per year.¹¹

Health Benefits of Unrefined Palm Oil

It isn't the effects of palm oil that are in question, but rather what happens to the oil during the refining process to remove the color and neutralize the smell. In an unrefined state, palm oil is high in healthy saturated fats and contains a number of nutrients important to your health.

Historical accounts suggest palm oil was a part of the diet of indigenous populations. In 2023, it was the sixth most-traded oil crop in the world, down from being the second most-traded oil crop, after soy, in 2006, with Malaysia and Indonesia as its main producers. In its natural state, palm oil is red. If you find white palm oil it has been refined and stripped of a dense nutrient profile.

Studies have found that unrefined palm oil plays a role in promoting cardiovascular health. In one study published in the British Journal of Biomedical Science, it was reported that despite the high levels of saturated fat in palm oil, the oil did not contribute to atherosclerosis and/or arterial thrombosis.¹⁴

Researchers suggested that this is due to the ratio of saturated to unsaturated fats in the oil, as well as its rich nutrient profile.

The tocotrienols found in palm oil support your heart against stress and have a protective property against heart disease. Studies suggest the antioxidant properties in palm oil help prevent various types of cancers including skin, gastrointestinal, lung, breast, prostate and other cancers.

Palm oil is an edible oil you may use in an unrefined state to get the most nutritional benefits. It does have a strong taste you may not find to your liking. You may also apply it directly on your skin to enjoy some of the benefits.

Injuries such as bruising, sunburn and cuts heal faster when unrefined palm oil is applied. To purchase palm oil certified sustainable, look for certification from the Roundtable for Sustainable Palm Oil.¹⁵

Slow Rise to Popularity

Nutella has enjoyed a raving fan base in Europe for a number of years. Introduced in the U.S. in 1983, it took decades for the spread to become popular. After an advertising campaign that started in 2009, sales skyrocketed to \$240 million. Thanks to a number of devoted fans, the spread is more than a financial success; it has become a food phenomenon.¹⁶

Admirers in the U.S. have created Facebook pages, recipe books, Twitter accounts and even developed a holiday, celebrated the first time on February 5, 2007.¹⁷ Initially the family owned business tried to squash the efforts of fans to spread the word, but the number of those devoted to Nutella has only grown.

Interestingly, experts think Nutella's fame has grown as millennials do not want to eat the same nut spreads of their parents and are searching for something unique to their food culture. In Europe, Nutella has been on the shelves for decades, but in the U.S., it satisfies the desire for a growing cult-fan base bent on eating something different.¹⁸

Recognizing the need to stay ahead of the curve, the company has been vocal about its product safety, created advertising campaigns to reassure its fan base, and is holding strong to its brand which invented the hazelnut, chocolate and sugar concoction.

Who's Watching Out for Your Health?

Unfortunately, it is not possible to depend upon governmental agencies, manufacturers or even independent agencies to police the products and foods that make it onto the grocery store shelves and pharmacies before landing in your home. The American Council on Science and Health (ACSH) is one such organization. The organization was started in 1978 to publicly support:¹⁹

"... evidence-based science and medicine. Then, as now, too much of what passes as "news" is little more than hype based on exaggerated findings.

Activist groups have targeted GMOs, vaccines, conventional agriculture, nuclear power, natural gas and 'chemicals."

While the rhetoric is believable, the historical comments from the organization fail to live up to their mission.²⁰ For instance, in an article in the Huffington Post, Elizabeth Whelan, late founder and then president of ACSH, criticized the Environmental Protection Agency (EPA) for funding research into chemicals that may trigger disease in children, claiming:²¹

"Unfortunately, the recipients of the grants from EPA to study "environmental chemicals" include those who have built their careers claiming that trace levels of industrial chemicals make children sick ... Despite conventional wisdom, there is no mainstream scientific evidence that points to children's health being imperiled by trace levels of chemicals in the environment."

Whelan often found herself defending industries that partially financed her efforts against environmental groups and agencies.²² In a commentary, Mark Shapiro, author of "Exposed: The Toxic Chemistry of Everyday Products and What's at Stake for American Power," a book evaluating global markets and toxic chemicals,²³ wrote:²⁴

"In her post, Dr. Whelan, President of the American Council for Science and Health, claims that 'there is no evidence whatsoever — not even a hint — of health problems from phthalates used by children or adults.' Alas, there is far more than a "hint" of such evidence. My book contains abundant, peer-reviewed evidence of such claims."

ACSH Claims Carcinogenic Rating for Palm Oil Worse Than 'Fake News'

Case in point is the ACSH's standpoint on DDT, a common insecticide used until 1972. During a radio interview Whelan commented that the fervor to ban DDT was based on emotion and not scientific fact.²⁵ Yet scientists have linked DDT to obesity, type 2 diabetes,²⁶ Alzheimer's disease²⁷ and an increased risk of heart disease.²⁸

The ACSH continues to fight against health with their current stand on refined oils.²⁹ In the organization's article commenting on research suggesting refined palm oil is carcinogenic, they write:³⁰

"Anyone who searches long enough can find that pretty much everything has been linked to cancer. Bacon. Cell phones. Wi-fi ... At some point the insanity has to stop. Unfortunately, we have yet to reach that point. Variations of the headline 'Nutella may cause cancer' are going viral. As usual, there is almost no support for such hysteria."

The hysteria the ACSH refers to is the considered and evidence-based research that demonstrates significant negative effects on health. For instance, when vegetable oils are heated they become unstable, producing large numbers of dangerous oxidation products, including aldehydes associated with lung cancer.³¹

Vegetable oils also have large amounts of biologically active omega-6 fats that lowers the ratio of omega-6 to omega-3 fats in your body,³² which may trigger cardiovascular disease, asthma, cancer, obesity and rheumatoid arthritis.³³

When you eat foods high in omega-6 fats it increases the amount of inflammation in your body, contributing to the development of the illnesses listed above.³⁴ The less omega-6 fats you eat the less omega-3s you need to maintain a healthy balance. An imbalance of omega-6 fats increases your risk of cancer,^{35,36} even without the additional toxic load of GE molecules from the refining process.

According to the International Agency for Research on Cancer (IARC), glycidol has been classified as a 2A carcinogen. In the IARC monograph they state:³⁷

"Glycidol is probably carcinogenic to humans (Group 2A). In making the overall evaluation, the Working Group took into consideration that glycidol is a direct-acting alkylating agent that is mutagenic in a wide range of in-vivo and in-vitro test systems."

Sources and References

- 1 Time. April 9, 2013. Thieves Make Off With 5 Tons of Nutella in Germany
- ² Mental Floss, 8 Things You May Not Know About Nutella
- 3 Nutella, Nutritional Information
- ⁴ Ferrero, March 2, 2015
- ⁵ Ferrero November 11, 2013
- 6 EFSA.europa.eu May 3, 2016
- ⁷ Ages. Health for Humans, Animals & Plants
- 8, 9, 11 Reuters, January 11, 2017
- ¹⁰ Journal of Business Cases and Applications. Volume 22
- 12 Statista. February 8, 2023
- 13 Friends of the Earth, August 2006
- ¹⁴ British Journal of Biomedical Science, 2009;66(4):216
- ¹⁵ New York Times, January 6, 2007
- 16, 18 The Daily Beast, May 21, 2014
- 17 Nutella, History
- ¹⁹ American Council on Science and Health, About
- ²⁰ Science Blogs November 9, 2007
- ²¹ Huffington Post, November 17, 2011
- ²² New York Times, April 17, 2014
- ²³ Amazon. Mark Schapiro. Exposed: The Toxic Chemistry of Everyday Products and What's at Stake for American Power
- ²⁴ Huffington Post, May 25, 2011

- ²⁵ American Council on Science and Health, September 16, 2010
- ²⁶ Science Daily July 30, 2014
- ²⁷ Science Daily January 27, 2014
- ²⁸ Science Daily April 8, 2015
- ^{29, 30} American Council on Science and Health, January 12, 2017
- ³¹ Food Chemistry, 2001; 120(1): 59
- 32 Biomedical Pharmacotherapy, 2002;56(8):365
- 33 Chris Kresser, May 8, 2010
- 34 American Journal of Clinical Nutrition, 2006;83(6):s1483
- ³⁵ British Journal of Cancer, 2003; 89(9): 1686
- ³⁶ BMC Medicine, 2012, New insights into the health effects of dietary saturated and omega-6 and omega-3 polyunsaturated fatty acids
- 37 International Agency for Research on Cancer, Glycidol