



# Oral contraceptive pills and nutrient depletions



## What are oral contraceptive pills?

Oral contraceptive pills, often referred to as birth control pills or “the pill,” are a type of pharmaceutical medication taken by mouth every day or as directed by your doctor to prevent pregnancy. They work by releasing hormones that stop your ovaries from releasing an egg each month, a process known as ovulation.

In addition to preventing pregnancy, birth control pills may be prescribed by your doctor for other health concerns, including:

- Acne
- Endometriosis symptom management
- Irregular periods
- Fibroids
- Period pain
- Polycystic ovary syndrome (PCOS) symptom management

## Nutrient depletions related to oral contraceptive pills

Oral contraceptive pills can affect the body’s ability to absorb and use nutrients from the diet, which can lead to lower levels of these nutrients in your body. The following table lists some of the most common nutrient depletions associated with oral contraceptive use.

## Nutrients commonly depleted by oral contraceptive pill use

<b>Folate</b>	Folate, sometimes referred to by its synthetic form folic acid, is needed for DNA synthesis and repair.
<b>Vitamin B2</b> (riboflavin)	This B vitamin is essential for the growth, development, and function of your body's cells.
<b>Vitamin B6</b> (pyridoxine)	Vitamin B6 helps promote nerve function, immune health, and healthy blood sugar levels.
<b>Vitamin B12</b> (cobalamin)	Vitamin B12 is essential for DNA synthesis and is required for optimal cell energy production throughout the entire body.
<b>Vitamin C</b>	This antioxidant is essential for immune function and collagen formation.
<b>Vitamin E</b>	This antioxidant promotes proper blood flow and helps protect the body from bacteria and viruses.
<b>Magnesium</b>	This mineral helps promote proper nerve function and healthy blood pressure levels.
<b>Selenium</b>	Selenium is a mineral that plays an important role in reproduction, thyroid hormone metabolism, immune health, and DNA synthesis.
<b>Zinc</b>	Zinc helps support your immune system and is important for wound healing.

## Strategies for preventing or addressing nutrient depletions










### Diet

A healthy, nutrient-dense diet is not only essential to overall health, but it may help counteract potential nutrient deficiencies resulting from oral contraceptive pills. Regardless of whether you're taking oral contraceptive pills, eating a diet that consists of a wide variety of healthy, minimally processed foods can help support your body by improving:

- Blood sugar (glucose) regulation
- Cognitive function
- Energy production
- Gut health
- Heart health
- Hormonal health
- Immune health
- Weight management

## Food sources of commonly depleted nutrients

If you're taking oral contraceptive pills and are concerned about specific nutrient depletions, consider including some of the following foods in your diet.

	<b>Folate</b>	Asparagus, avocado, beef liver, broccoli, Brussels sprouts, spinach
	<b>Vitamin B2 (riboflavin)</b>	Almonds, beef, beef liver, cheese, clams, eggs, milk, mushrooms, yogurt
	<b>Vitamin B6 (pyridoxine)</b>	Bananas, beef liver, chickpeas, chicken, potatoes, salmon, turkey
	<b>Vitamin B12 (cobalamin)</b>	Beef, beef liver, cheese, clams, milk, nutritional yeast, salmon, tuna, yogurt
	<b>Vitamin C</b>	Broccoli, citrus fruits, kiwifruit, potatoes, red pepper, strawberries, tomatoes
	<b>Vitamin E</b>	Almonds, hazelnuts, peanuts, peanut butter, spinach, sunflower seeds
	<b>Magnesium</b>	Almonds, black beans, cashews, chia seeds, edamame (soybeans), peanuts, pumpkin seeds, spinach
	<b>Selenium</b>	Beef, Brazil nuts, cottage cheese, eggs, halibut, ham, sardines, shrimp, turkey, yellowfin tuna
	<b>Zinc</b>	Beef, cheese, oysters, pork, pumpkin seeds, shrimp, turkey

## Supplements

When diet alone isn't enough, your practitioner may recommend dietary supplements to improve nutrient depletions caused by oral contraceptive use. Always speak to your integrative healthcare provider before introducing new supplements to your wellness plan. They can help monitor your nutrient levels and make recommendations as needed.

# References

1. Benefits of healthy eating. (2021, May 16). Centers for Disease Control and Prevention. <https://www.cdc.gov/nutrition/resources-publications/benefits-of-healthy-eating.html>
2. Cooper DB, Patel P, Mahdy H. Oral Contraceptive Pills. [Updated 2022 Nov 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK430882/>
3. Kudesia, R., Alexander, M., Gulati, M., Kennard, A., & Tollefson, M. (2021). Dietary Approaches to Women's Sexual and Reproductive Health. *American journal of lifestyle medicine*, 15(4), 414–424.
4. Office of Dietary Supplements - Folate. (n.d.). <https://ods.od.nih.gov/factsheets/Folate-HealthProfessional/>
5. Office of Dietary Supplements - magnesium. (n.d.). <https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/>
6. Office of Dietary Supplements - selenium. (n.d.). <https://ods.od.nih.gov/factsheets/Selenium-HealthProfessional/>
7. Office of Dietary Supplements - Vitamin B6. (n.d.). <https://ods.od.nih.gov/factsheets/VitaminB6-HealthProfessional/>
8. Office of Dietary Supplements - Vitamin B12. (n.d.). <https://ods.od.nih.gov/factsheets/VitaminB12-HealthProfessional/>
9. Office of Dietary Supplements - riboflavin. (n.d.). <https://ods.od.nih.gov/factsheets/Riboflavin-HealthProfessional/>
10. Office of Dietary Supplements - Vitamin C. (n.d.). <https://ods.od.nih.gov/factsheets/VitaminC-HealthProfessional/>
11. Office of Dietary Supplements - Vitamin E. (n.d.). <https://ods.od.nih.gov/factsheets/VitaminE-HealthProfessional/>
12. Office of Dietary Supplements - Zinc. (n.d.). <https://ods.od.nih.gov/factsheets/Zinc-HealthProfessional/>
13. Palmery, M., Saraceno, A., Vaiarelli, A., & Carlomagno, G. (2013). Oral contraceptives and changes in nutritional requirements. *European review for medical and pharmacological sciences*, 17(13), 1804–1813.
14. Shah, D., Patil, M., & National PCOS Working Group (2018). Consensus Statement on the Use of Oral Contraceptive Pills in Polycystic Ovarian Syndrome Women in India. *Journal of human reproductive sciences*, 11(2), 96–118.



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