

What a difference a day made: Drambuie and bananas or a mirepoix made with chicken livers may affect the frequency of shaving the own face periodically

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Sir,

Biotin is one of the B complex vitamins. This group of vitamins is responsible for breaking down fat and carbohydrates from the foods man eats and turning them into energy. This energy provides fuel for many of the body's necessary functions. Biotin is also sometimes called B-7, vitamin H, or coenzyme R [1-3].

Biotin promotes good skin health, and it helps regulate the LDL (bad) cholesterol and blood sugar. Biotin is also necessary to produce keratin, a protein that promotes strong nails and hair, but especially face hair.

Biotin is a water-soluble vitamin. That means it's not stored in the body for long. Human organism doesn't naturally produce it, either. However, the bacteria in man's gut can produce biotin. These bacteria, also called intestinal flora, have a healthy impact on health.

A biotin deficiency isn't as common as other deficiencies. Few people eating a healthy, well-balanced diet will struggle to have enough biotin. That's because many common foods contain large amounts of the vitamin naturally.

Still, a biotin deficiency can occur. If it does, these symptoms may develop:

Red rashes on the skin, especially the face; dry or scaly skin; dry eyes; brittle hair; hair loss; fatigue; insomnia or difficulty sleeping; loss of appetite; nausea; depression;

burning or prickling sensation in the hands and feet; muscle pain; changes in the intestinal tract (frequent upset stomach); cracking in the corners of the mouth; seizures; difficulty walking.

The symptoms of biotin deficiency can be confused for many other disorders or issues. If the suspect that a patient is not getting enough B-7, a blood test can measure the level in his blood. Sometimes low levels of vitamin B-7 are the result another disorder or condition. A biotin deficiency is quite rare. Doctors typically look to one of six possible causes to explain why your B-7 levels might be so low.

These causes are:

Certain medicines that may prevent body from absorbing vitamins correctly. These medications include antibiotics and anti-seizure drugs. Additionally, antibiotics destroy the good bacteria in the gut that can naturally produce biotin.

Strict eating may prevent from getting a wide variety of vitamins and minerals from the food man eats. Eating a well-balanced diet is vital for health, and can still maintain or lose weight occasionally.

Biotinidase deficiency is a disorder is very rare. It prevents body from reusing biotin. Typically, the human body can reuse B-7 a few times before it's removed in waste. People with this disorder cannot recycle the vitamin. This disorder is often diagnosed very early in

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life because of severe symptoms. These symptoms often appear within months of birth.

There are some other genetic disorders that may also result in biotin deficiency, including holocarboxylase synthetase deficiency, biotin transport deficiency, and phenylketonuria [4-6], Holocarboxylase synthetase deficiency and biotin transport deficiency are both extremely rare. Phenylketonuria is more common. Infants are screened at birth for this condition, since it's associated with severe neurologic problems if not recognized and treated early.

Treatment for a biotin deficiency typically fits into two main categories. These are food and supplements.

Daily requirements for biotin aren't difficult to reach. An adult should aim to eat 30 micrograms (mcg) per day.

Getting this vitamin from food is quite easy. Many common foods contain large amounts of biotin. These include:

Green peas, legumes, and lentils; sunflower seeds and sunflower butter; carrots, cauliflower, and mushrooms; cooked eggs, especially egg yolk; seafood; whole grains, include barley and corn.

Food processing destroys biotin. Eat as many of these foods in their whole, unprocessed forms to get the highest vitamin quantity possible.

Antibiotics can destroy the healthy bacteria in the intestines. These bacteria can produce biotin naturally. Without them, one may become deficient. Anti-seizure medicines can also prevent vitamin absorption. If some of these drugs are used for a long period of time, one may need a supplement.

The first signs and symptoms of a biotin deficiency can be mistaken for many disorders and conditions.

The chief aim of this case report is to evaluate the influence of the regular ingestion of vitamin B7 (dietary support) on the face hair growth.

The study develops on the screening effectuated on a man (a road-mender) who has the tendency of a very fecund face hair growth and the scope of the investigation is to let the volunteer undergo to an alternate diet that comprehends one week of assuming food containing high dosages of biotin and one week

of assuming food containing very neglectable dosage of the same vitamin.

The AA will demonstrate that when the volunteer is on a diet very rich in biotin, he will shave every morning, otherwise when the volunteer does not assume vitamin B7 he will shave only onnce pro week.

The AA recruited a road mender who worked 9 hours/day in a week and had to follow two different types of diet:

- 1) (baptized positive week): at lunch two sandwiches made of whole meal bread with omelette and ham and two bananas and at supper a rich and fresh guacamole containing avocado, tomatoes and coriander, boiled carrots and peas, roasted chicken livers with cognac and raspberries with Dranbuie. After dinner the patient, being Neapolitan, loves to munch peanuts and hazelnuts. This first kind of diet lasts 7 days.
- 2) (baptized negative week): At lunch two sandwiches made of milk bread with salami or tuna fish, or camembert ot taleggio (extremely poor in biotin) and at supper swordfish cooked with origan or thyme, ginger and garlic (these represent natural antibiotics and thus tend to distroy biotin in biwist and andleofen) or fricandeau of beef brain or cibreo (mirepoix) made with goose kidneys and triple sec. Aristocrat [7] and parmisan.

Moreover it must be added that the volunteer uses to keep everyday two pills of doxyciclyn as profilactic against covid variants and carbamazepine before to sleep to relax better.

He will take these pills only during the negative week.

The AA observed finally that during the positive week the volunteer had to shave every morning, meanwhile during the negative week he used to shave only twice.

During the negative week the volunteer suffers from dry eyes, nausea and severe insomnia.

Statement of Human and Animal Rights

All the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the 2008 revision of the Declaration of Helsinki of 1975.

Statement of Informed Consent

Informed consent for participation in this study was obtained from all patients.

REFERENCES

1. Biotin – Fact Sheet for Health Professionals. Office of Dietary Supplements, US National Institutes of Health. 8 December 2017. Retrieved 25 February 2018.
2. Penberthy WT, Sadri M, Zempleni J. Biotin. In BP Marriott, DF Birt, VA Stallings, AA Yates (eds.). Present Knowledge in Nutrition, Eleventh Edition. London, United Kingdom: Academic Press (Elsevier). 2020:289–304.
3. What are common treatments for phenylketonuria (PKU)??. NICHD. 2013-08-23. Archived from the original on 5 October 2016. Retrieved 12 September 2016.
4. Al Hafid N, Christodoulou J. Phenylketonuria: a review of current and future treatments. *Transl Pediatr.* 2015;4:304-17.
5. National Institutes of Health Consensus Development Conference Statement Phenylketonuria: Screening and Management??. NICHD. October 16–18, 2000. Archived from the original on 5 October 2016. Retrieved 12 September 2016.
6. Bernstein LE, Rohr F, Helm JR. Nutrition Management of Inherited Metabolic Diseases: Lessons from Metabolic University. Springer. 215. p. 91
7. Banks I, Raw Spirit: In Search of the Perfect *Dram*, London, Century, 2003.

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