

Listening Comprehension: *A Definition of Vitiligo*

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Directions: Study the vocabulary words below, and take a minute to look over the answer choices for each question. Then listen to the lecture on vitiligo. You will hear it twice. During the first reading, take notes on the main ideas. During the second reading, take notes on the details. After the second reading, you will hear each question twice. Select the best answer for each question.

Vocabulary:

1. **pigment** *n.* – any material resulting in color in plant or animal cells
2. **pernicious anemia** *n.* – a disease in which red blood cells are malformed due to the body's inability to absorb vitamin B₁₂.
3. **retina** *n.* – The innermost layer of the eye containing the rods and cones, which are specialized light-sensitive cells.
4. **orifice** *n.* – an opening in the body
5. **ophthalmologist** *n.* – a doctor who specializes in diseases of the eye.
6. **gluten** *n.* – a mixture of proteins found in wheat

A Definition of Vitiligo

Vitiligo (viti'laigou) is a skin condition that is characterized by the loss of melanocytes, which are cells that give the skin color. The loss of melanocytes causes smooth, white patches to occur in the midst of normal pigmented skin. Those with vitiligo sometimes experience eye abnormalities and have a higher incidence of
5 thyroid disease, diabetes, and pernicious anemia. Vitiligo affects approximately 2% of the world's population. It occurs in all races of people with males and females equally affected. Although vitiligo can develop in any area of the body, it is more visible in areas that are exposed to the sun and in darker skin types. The condition can begin at any age, but 50% of cases set in before the age of 20. In an interview with Oprah
10 Winfrey in the early 1990s, Michael Jackson attributed the whiteness of his skin to this disorder, claiming that he did not bleach his skin. In fact, a friend claimed he started wearing his signature sequin glove to cover the vitiligo that had begun to appear on his hand a decade earlier. Further understanding of the disease can be achieved by studying its causes, symptoms, diagnosis, and treatment.

15 The precise cause of vitiligo is unknown, but those with the disorder seem to have a genetic tendency toward developing it. Researchers have also observed that the onset of the disorder seems to be triggered by a traumatic or stressful event, such as an accident, the loss of a job, the death of a family member, severe sunburn, or a serious illness. Several theories discuss the underlying mechanisms by which the
20 disease develops. One theory claims that nerve endings in the skin release a chemical that is toxic to melanocytes. Another theory states that the melanocytes simply self-destruct. The third explanation is that vitiligo is a type of autoimmune disease in which the immune system targets the body's own cells and tissues.

25 The symptoms of the condition vary somewhat, depending on the form the patient
is suffering from. In generalized vitiligo, the most common form, patients exhibit
widely distributed areas of depigmentation that are particularly noticeable around the
extremities and body orifices, such as the mouth, eyes, nostrils, genitalia, and
umbilicus. Although the patches are initially small, they often enlarge and change
shape. Hair growing from the affected areas of skin also lacks color. In some cases,
30 patients experience inflammation or pigment abnormalities of the iris or retina. In
universal vitiligo, which is another form of the disease, the depigmentation
encompasses most of the body. However, in mucosal vitiligo, depigmentation only
occurs in the mucus membranes. If children develop this disease, they tend to only
have symptoms in one area, which is called focal vitiligo.

35 Diagnosis of vitiligo is based on an examination of the patient's skin. If vitiligo is
suspected, the doctor focuses on particular aspects of the patient's medical history.
These include a family history of vitiligo or any autoimmune disease, as well as a
personal history of other skin conditions, rashes, sunburn, or other skin trauma within
two to three months of the start of pigment loss. Other aspects of the patient's medical
40 history that the doctor asks about are stress and physical illness. If necessary, the
doctor takes a small sample of the affected skin for biopsy and a blood sample to
check the patient's blood cell count and thyroid function. The blood sample is also
used to detect any antibodies that indicate the presence of an autoimmune disease.
If the patient's eyes are affected, the doctor refers the patient to an ophthalmologist.

45 While no cure is known for this disease, several options can improve the
appearance of the skin. These options include cosmetics, which cover the white areas
that are not covered by clothing, and sunscreens, which prevent burning of the
affected areas and keep the normal skin around the patches from becoming darker.
Bleaching or depigmentation of the normal skin is another option, which can be
50 undertaken to achieve skin that is more uniform in color. Severe cases are treated with
corticosteroid creams and oral medications, but these have undesirable side effects.
Skin transplantation is an additional option for those who are severely affected.
Because the disfigurement caused by the disease is difficult for patients to deal with,
doctors also recommend psychotherapy or psychological counseling. Many cases
55 have reported improvement by nontraditional treatment methods. For example, one
patient who suffered from vitiligo for 25 years was later diagnosed with celiac
disease. After the patient eliminated gluten from his diet, which is required to treat
celiac disease, his skin began repigmenting within 6 months.

60 In conclusion, vitiligo is a skin condition whose cause is unknown. It is believed
to have a genetic component, but other factors have been found to trigger its onset. It
is very easily diagnosed because depigmentation of the skin is its main symptom;
however, to confirm the diagnosis, the doctor may order a number of tests. While
treatment cannot cure vitiligo, it can relieve symptoms and improve the patient's
appearance. The patient may also benefit from psychological counseling.