

# Word for Word

## Heterogeneous versus heterogenous: An eensy difference

*Heterogeneous* and *heterogenous* are often used interchangeably. However, although some sources<sup>1,2</sup> consider *heterogenous* (he-tə-**rah**-jə-nəs) to be a less common, alternative spelling of *heterogeneous* (he-tə-rə-**jee**-nee-əs), the two terms have distinct definitions in medical and biological contexts.

Something that is *heterogeneous* consists of diverse elements.<sup>3,4</sup>

**Examples:**

The clinical trial recruited patients with heterogeneous racial and ethnic backgrounds.

The mammogram revealed that the patient had heterogeneously dense breast tissue.

In medical contexts, something that is *heterogenous* is derived from another source or species.<sup>2</sup> It is a synonym of *heterogenic*.<sup>5</sup>

**Example:**

The patient received a heterogenous bone graft.

It is important to note that some sources<sup>1</sup> consider *heterogenous* to be an obsolete medical term and solely an alternative spelling of *heterogeneous*. However, such usage can cause confusion, so it is best to use the more common spelling *heterogeneous* for clarity.

**Confusing:** The tumor consisted of heterogenous cell types.

**Better:** The tumor consisted of heterogeneous cell types.

## References

1. Garner BA. *Garner's Modern American Usage*, 3rd ed. Oxford University Press; 2009:650-651.
2. Merriam-Webster.com. Heterogenous. Accessed August 31, 2023. <https://www.merriam-webster.com/dictionary/heterogenous>
3. Merriam-Webster.com. Heterogeneous. Accessed August 31, 2023. <https://www.merriam-webster.com/dictionary/heterogeneous>
4. NCI Dictionary of Cancer Terms. Heterogeneous. Accessed August 31, 2023. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/heterogeneous>
5. NCI Dictionary of Cancer Terms. Heterogenous. Accessed August 31, 2023. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/heterogenous>