# Where Did The Human Races Come From?

Where did the human races come from? According to the Bible, all humans on Earth today are descended from Noah and his wife, his three sons and their wives, and before that from Adam and Eve (Genesis 1-11). But today we have many different groups, often called "races," with what seem to be greatly differing features. The most obvious of these is skin color. Many see this as a reason to doubt the Bible's record of history. They believe that the various groups could have arisen only by evolving separately over tens of thousands of years. However, as we shall see, this does not follow from the biological evidence.

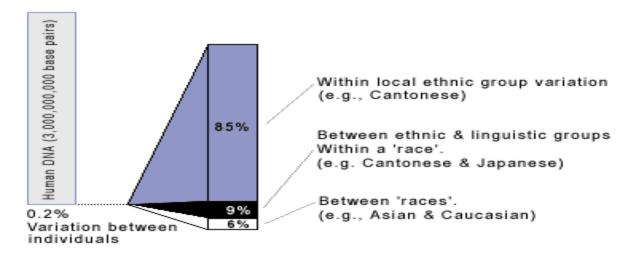


The Bible tells us how the population that descended from Noah's family had one language and by living in one place were disobeying God's command to "fill the earth" (Genesis 9:1, 11:4). God confused their language, causing a break-up of the population into smaller groups which scattered over the Earth (Genesis 11:8-9). Modern genetics show how, following such a break-up of a population, variations in skin color, for example, can develop in only a few generations. There is good evidence that the various people groups we have today have *not* been separated for huge periods of time.<sup>1</sup>

#### What Is a "Race"?

There is really only one race—the human race. The Bible teaches us that God has "made of one blood all nations of men" (Acts 17:26). Scripture distinguishes people by tribal or national groupings, not by skin color or physical appearance. Clearly, though, there are groups of people who have certain features (e.g., skin color) in common, which distinguish them from other groups. We prefer to call these "people groups" rather than "races," to avoid the evolutionary connotations associated with the word "race."

All peoples can interbreed and produce fertile offspring. This shows that the biological differences between the "races" are not very great. In fact, the DNA differences are trivial. The DNA of any two people in the world would typically differ by just 0.2 percent.<sup>2</sup> Of this, only 6 percent can be linked to racial categories; the rest is "within race" variation.



The variation in DNA between human individuals shows that racial differences are trivial. This genetic unity means, for instance, that white Americans, although ostensibly far removed from black Americans in phenotype, can sometimes be better tissue matches for them than are other black Americans.

Anthropologists generally classify people into a small number of main racial groups, such as the Caucasoid (European or "white"),<sup>3</sup> the Mongoloid (which includes the Chinese, Inuit or Eskimo, and Native Americans), the Negroid (black

Africans), and the Australoid (the Australian Aborigines). Within each classification, there may be many different subgroups.

Virtually all evolutionists would now say that the various people groups did not have separate origins. That is, different people groups did not each evolve from a different group of animals. So they would agree with the biblical creationist that all people groups have come from the same original population. Of course, they believe that such groups as the Aborigines and the Chinese have had many tens of thousands of years of separation. Most believe that there are such vast differences between the groups that there *had* to be many years for these differences to develop.

One reason for this is that many people believe that the observable differences arise from some people having unique features in their hereditary make-up which others lack. This is an understandable but incorrect idea. **Let's look at skin color**, for instance.

#### What about SKIN COLORS?

It is easy to think that since different groups of people have "yellow" skin, "red" skin, "black" skin, "white" skin, and "brown" skin, there must be many different skin pigments or colorings. And since different chemicals for coloring would mean a different genetic recipe or code in the hereditary blueprint in each people group, it appears to be a real problem. How could all those differences develop within a short time?



However, we all have the same coloring pigment in our skin — melanin. This is a dark-brownish pigment that is produced in different amounts in special cells in our skin. If we had *none* (as do people called albinos, who inherit a mutation-caused defect, and cannot produce melanin), then we would have a very white or pink skin coloring. If we produced a little melanin, we would be European white. If our skin produced a great deal of melanin, we would be a very dark black. And in between, of course, are all shades of brown. There are no other significant skin pigments. 4

In summary, from currently available information, the really important factor in determining skin color is melanin — the amount produced.

This situation is true not only for skin color. Generally, whatever feature we may look at, no people group has anything that is essentially different from that possessed by any other. For example, the Asian, or almond, eye differs from a typical Caucasian eye in having more fat around them. Both Asian and Caucasian eyes have fat — the latter simply have less.





### What does melanin do?

It protects the skin against damage by ultraviolet light from the sun. If you have too little melanin in a very sunny environment, you will easily suffer sunburn and skin cancer. If you have a great deal of melanin, and you live in a country where there is little sunshine, it will be harder for you to get enough vitamin D (which needs sunshine for its production in your body). You may then suffer from vitamin D deficiency, which could cause a bone disorder such as rickets.

We also need to be aware that we are not born with a genetically fixed amount of melanin. Rather, we have a genetically fixed *potential* to produce a certain amount, and the amount increases in response to sunlight. For example, you may have noticed that when your Caucasian friends (who spent their time indoors during winter) headed for the beach at the beginning of summer they all had more or less the same pale white skin color. As the summer went on, however, some became much darker than others.

**How is it that many different skin colors can arise in a short time?** Remember, whenever we speak of different "colors" we are referring to different shades of the one color, melanin.

If a person from a very black people group marries someone from a very white group, their offspring (called mulattos) are mid-brown. It has long been known that when mulattos marry each other, their offspring may be virtually any "color," ranging from very dark to very light. Understanding this gives us the clues we need to answer our question, but first we must look, in a simple way, at some of the basic principles of heredity.

## Heredity

Each of us carries information in our body that describes us in the way a blueprint and specifications describe a furnished building. It determines not only that we will be human beings, rather than cabbages or crocodiles, but also whether we will have blue eyes, short nose, long legs, etc. When a sperm fertilizes an egg, *all* the information that specifies how the person will be built (ignoring such superimposed factors as exercise and diet) is already present. Most of this information is in coded form in our DNA.<sup>5</sup>

To illustrate coding, a piece of string with beads on it can carry a message in Morse code. The piece of string, by the use of a simple sequence of short beads, long beads (to represent the dots and dashes of Morse code), and spaces, can carry the same information as the English word "help" typed on a sheet of paper. The entire Bible could be written thus in Morse code on a long enough piece of string.

In a similar way, the human blueprint is written in a code (or language convention) which is carried on very long chemical strings of DNA. This is by far the most efficient information storage system known, greatly surpassing any foreseeable computer technology. <sup>6</sup> This information is copied (and reshuffled) from generation to generation as people reproduce.

The word "gene" refers to a small part of that information which has the instructions for only one type of enzyme, for example. It may be simply understood as a portion of the "message string" containing only one specification. For example, there is one gene that carries the instructions for making hemoglobin, the protein that carries oxygen in your red blood cells. If that gene has been damaged by mutation (such as copying mistakes during reproduction), the instructions will be faulty, so it will often make a crippled form of hemoglobin, if any. (Diseases such as sickle-cell anemia and thalassemia result from such mistakes.)

So, with an egg which has just been fertilized — where does all its information, its genes, come from? One half comes from the father (carried in the sperm), and the other half from the mother (carried in the egg).

Genes come in pairs, so in the case of hemoglobin, for example, we have two sets of code (instruction) for hemoglobin manufacture, one coming from the mother and one from the father.

This is a very useful arrangement, because if you inherit a damaged gene from one parent hat could instruct your cells to produce a defective hemoglobin, you are still likely to get a normal one from the other parent which will continue to give the right instructions. Thus, only half the hemoglobin in your body will be defective. (In fact, each of us carries hundreds of genetic mistakes, inherited from one or the other of our parents, which are usefully "covered up" by being matched with a normal gene from the other parent — see "Where Did Cain Get His Wife?")

Further information about racial issues...

### Return to our Q&A Section

## **Footnotes**

- 1. Worldwide variations in mitochondrial DNA (the "Mitochondrial Eve" story) were claimed to show that all people today trace back to a single mother (living in a small population) 70,000 to 800,000 years ago. Recent findings on the rate of mitochondrial DNA mutations shorten this period drastically to put it within the biblical time-frame. See L. Lowe and S. Scherer, "Mitochondrial Eve: The Plot Thickens," *Trends in Ecology and Evolution*, 1997, 12(11):422-423; C. Wieland, "A Shrinking Date for Eve," *CEN Technical Journal*, 1998, 12(1):1-3.
- 2. J.C. Gutin, "End of the Rainbow," *Discover*, November 1994, pp. 71-75.

- 3. However, people inhabiting the Indian subcontinent are mainly Caucasian and their skin color ranges from light brown to quite dark. Even within Europe, skin color ranges from very pale to brown.
- 4. Other substances can in minor ways affect skin shading, such as the colored fibers of the protein elastin and the pigment carotene. However, once again we all share these same compounds, and the principles governing their inheritance are similar to those outlined here. Factors other than pigment in the skin may influence the shade perceived by the observer in subtle ways, such as the thickness of the overlying (clear) skin layers, the density and positioning of the blood capillary networks, etc. In fact, "melanin," which is produced by cells in the body called melanocytes, consists of two pigments, which also account for hair color. Eumelanin is very dark brown, phaeomelanin is more reddish. People tan when sunlight stimulates eumelanin production. Redheads, who are often unable to develop a protective tan, have a high proportion of phaeomelanin. They have probably inherited a defective gene which makes their pigment cells "unable to respond to normal signals that stimulate eumelanin production." See P. Cohen, "Redheads Come Out of the Shade," New Scientist, 1995, 147(1997):18.
- 5. Most of this DNA is in the nucleus of each cell, but some is contained in mitochondria, which are outside the nucleus in the cytoplasm. Sperm contribute only nuclear DNA when the egg is fertilized. Mitochondrial DNA is inherited only from the mother, via the egg.
- 6. W. Gitt, "Dazzling Design in Miniature," Creation, 1997, 20(1):6.
- 7. Incredibly, sometimes the same stretch of DNA can be "read" differently, to have more than one function, by starting the reading process from different points. The creative intelligence behind such a thing is mind-boggling.