The heritability of human height is estimated to be between 0.6–0.8.
**History**

Domestication – alteration of a species to benefit humans

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**Maize and its wild relative teosinte**

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**Centers of origin of selected crops**

Note: This map was developed by the Global Agricultural Information Network (USDA Foreign Agricultural Service). The map shows the geographic regions where each crop originated.

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**Table: Centers of Origin**

<table>
<thead>
<tr>
<th>Species</th>
<th>Date</th>
<th>Location of Origin</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dog (Canis lupus familiaris)</td>
<td>15000 BC</td>
<td>East Asia</td>
<td>Hunting, transportation, companionship</td>
</tr>
<tr>
<td>Sheep (Ovis aries)</td>
<td>between 9000 - 11000 BC</td>
<td>Southwest Asia</td>
<td>Wool, meat, milk</td>
</tr>
<tr>
<td>Goat (Capra aegagrus hircus)</td>
<td>15000 BC</td>
<td>Iran</td>
<td>milk, meat</td>
</tr>
<tr>
<td>Pig (Sus scrofa domestica)</td>
<td>9000 BC</td>
<td>Near East, China</td>
<td>meat</td>
</tr>
<tr>
<td>Cow (Bos primigenius taurus)</td>
<td>8000 BC</td>
<td>India, Middle East, and Southeast Africa</td>
<td>meat, milk, milk fertilisation, muscle</td>
</tr>
<tr>
<td>Zebu (Bos primigenius indicus)</td>
<td>8000 BC</td>
<td>India</td>
<td>milk, milk fertilisation, milk</td>
</tr>
<tr>
<td>Cat (Felis catus)</td>
<td>7500 BC</td>
<td>Near East</td>
<td>Hunting, companionship</td>
</tr>
</tbody>
</table>
Populations whose main food is cereal grains have higher frequencies of a PRLP2 gene variant than do people who have other diets.

Old world distribution of frequency of lactase persistence (lactose digesters) taken from available published data. Red indicates the proportion of lactose digesters in a given population with yellow representing maldigesters. Charts with a green central circle indicate that the overall published frequency for a country is comprised of different ethnic groups with very different phenotype frequencies. Data complied by Ingram 2007.

The Golden Age of Greece
500-300BC
**Plato**

"the modest natures look for a partner like themselves and as far as they can they choose their wives from women of the quiet type…The courageous class does just the same thing…though both types should be doing exactly the opposite…because if a courageous character is reproduced for many generations, without any admixture of the moderate types, the natural course of development is that at first it becomes superlatively powerful but in the end it breaks out into sheer fury and madness."

- inbreeding depression

**Democritus**

"More people become able by exercise than by natural predisposition."

- concept of heritability

**Hippocrates**

"First the Macrocephali, no other race has heads like theirs. The chief cause of the length of their heads was first found to be in their customs, but nowadays nature collaborates with tradition and they consider those with the longest heads the most nobly born. The custom was to mold the head of the newly-born children with their hands and force it to increase in length by the application of bandages and other devices which destroy the spherical shape of the head and produce elongation instead. The characteristic was thus acquired at first by artificial means, but as time passed it became an inherited characteristic and the practice was no longer necessary."

- inheritance of acquired characteristics
Aristotle

“For it happened that the children of parents who bore scars are also scarred in just the same way and in just the same place. In Chalcedon a man who had been branded on the arm had a child who showed the same branded letter though it was not so distinct and had become blurred.”

Aristotle

- also believed that characters not yet expressed such as graying hair or baldness could be transmitted
- an insight into the difference between phenotype and genotype, i.e. reality versus potentiality

Chevalier de Lamarck

Lamarck’s views on evolution

- use-and-disuse principle
- inheritance of acquired characteristics
- inner perfecting principle
- transformation not extinction

Charles Darwin
"A particle of small-pox matter, so minute as to be borne by the wind, must multiply itself many thousandfold in a person thus inoculated; and so with the contagious matter of scarlet fever. It has recently been ascertained that a minute portion of the mucous discharge from an animal infected with rinderpest, if placed in the blood of a healthy ox, increases so fast that in a short space of time 'the whole mass of tobes, weighing many pounds, is infected, and every small particle of that blood contains enough poison to give, within less than forty-eight hours, the disease to another animal.'"
PARTICULATE INHERITANCE

THE MENDELIAN THEORY THAT GENETIC INFORMATION IS TRANSMITTED FROM ONE GENERATION TO ANOTHER IN THE FORM OF DISCRETE UNITS

BLENDING INHERITANCE

AN OBSOLETE THEORY THAT THE TRAITS OF AN OFFSPRING ARE AN AVERAGE OF THOSE OF ITS PARENTS BECAUSE OF THE PERMANENT BLENDING OF THEIR SEX CELL INFLUENCES